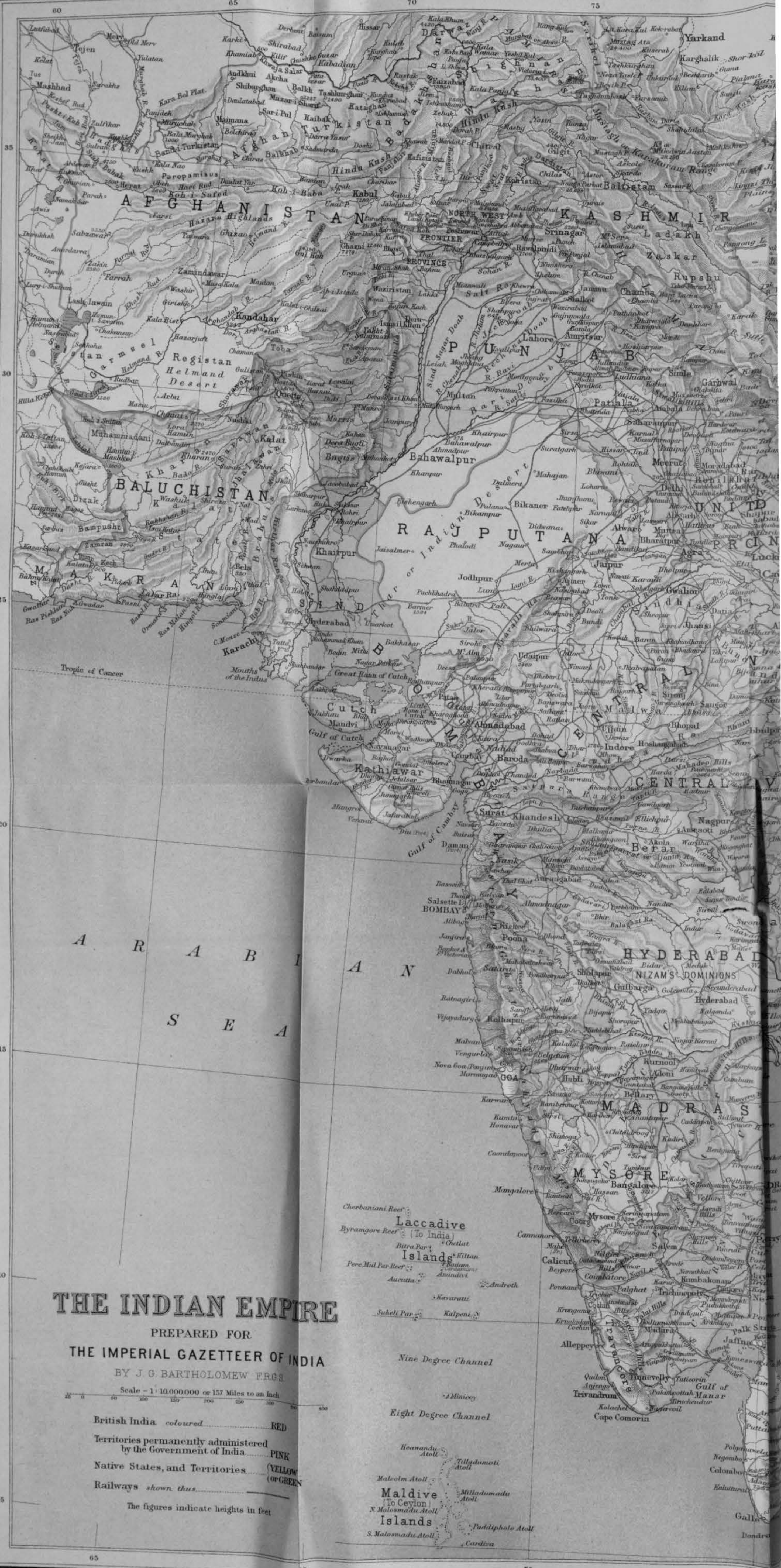
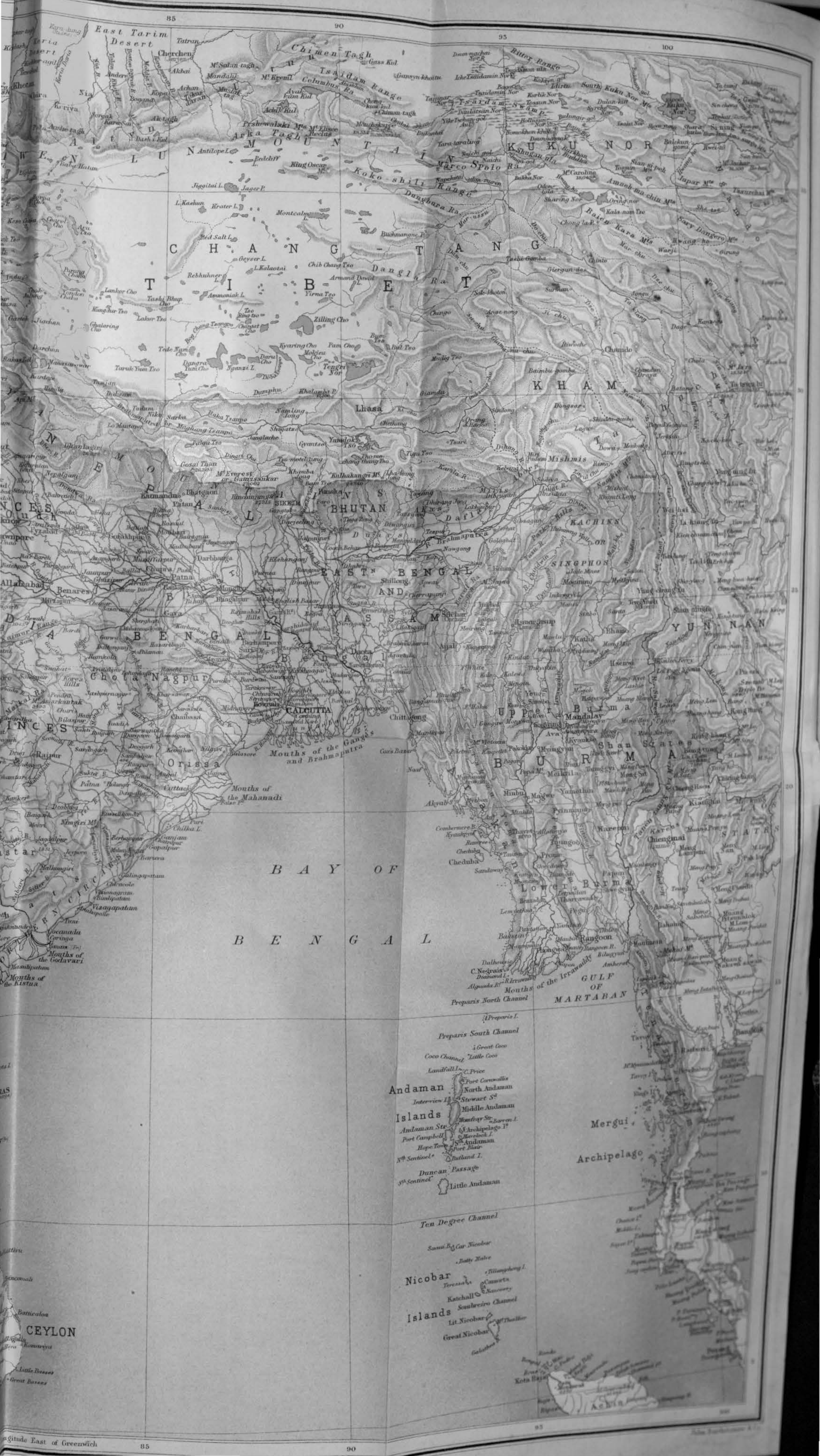


The Edinburgh Geographical Institute



85
90
95
100
East Tarim
Desert
Cherchen
Chimen Tagh
Tsaidam Range
Columbus Ra.
Arka Tagh
Altyn Tagh
MOUNTAINS
Koko shili Range
Marco Polo Ra.
KUKU NOR
Dungbura Ra.
CHANG TANG
TIBET
Dangla Ra.
Lhasa
KHAM
Mishmis
NEPAL
Katmandu
SIKKIM
BHUTAN
Darjeeling
EAST BENGAL
AND
ASSAM
Brahmaputra
Shillong
BENGAL
Patna
Benares
Allahabad
Chota Nagpur
Orissa
CALCUTTA
Dacca
Chittagong
Mouths of the Ganges and Brahmaputra
Mouths of the Mahanadi
KACHINS
OR
SINGPHOS
YUNNAN
Upper Burma
Mandalay
Ava
Shan States
BURMA
Akyab
Cheduba
Lower Burma
Rangoon
Bassein
C. Negrais
Mouths of the Irrawaddy
GULF OF MARTABAN
BAY OF BENGAL
Vizagapatam
Cocanada
Mouths of the Godavari
Mouths of the Kistna
Preparis North Channel
Preparis South Channel
Coco Channel
Andaman Islands
North Andaman
Middle Andaman
Port Blair
S.th Andaman
Duncan Passage
Little Andaman
Ten Degree Channel
Car Nicobar
Nicobar Islands
Katchall
Sombrero Channel
Lit. Nicobar
Great Nicobar
Mergui Archipelago
Achin
CEYLON
Batticaloa
Little Basses
Great Basses
Longitude East of Greenwich

THE
IMPERIAL GAZETTEER
OF INDIA

VOL. XI

COONDAPOOR
TO
EDWARDESĀBĀD

NEW EDITION

PUBLISHED UNDER THE AUTHORITY OF HIS MAJESTY'S
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INTRODUCTORY NOTES

NOTES ON TRANSLITERATION

Vowel-Sounds

a has the sound of *a* in 'woman.'
ā has the sound of *a* in 'father.'
e has the vowel-sound in 'grey.'
i has the sound of *i* in 'pin.'
ī has the sound of *i* in 'police.'
o has the sound of *o* in 'bone.'
u has the sound of *u* in 'bull.'
ū has the sound of *u* in 'flute.'
ai has the vowel-sound in 'mine.'
au has the vowel-sound in 'house.'

It should be stated that no attempt has been made to distinguish between the long and short sounds of *e* and *o* in the Dravidian languages, which possess the vowel-sounds in 'bet' and 'hot' in addition to those given above. Nor has it been thought necessary to mark vowels as long in cases where mistakes in pronunciation were not likely to be made.

Consonants

Most Indian languages have different forms for a number of consonants, such as *d*, *t*, *r*, &c., marked in scientific works by the use of dots or italics. As the European ear distinguishes these with difficulty in ordinary pronunciation, it has been considered undesirable to embarrass the reader with them; and only two notes are required. In the first place, the Arabic *k*, a strong guttural, has been represented by *k* instead of *q*, which is often used. Secondly, it should be remarked that aspirated consonants are common; and, in particular, *dh* and *th* (except in Burma) never have the sound of *th* in 'this' or 'thin,' but should be pronounced as in 'woodhouse' and 'boathook.'

Burmese Words

Burmese and some of the languages on the frontier of China have the following special sounds:—

aw has the vowel-sound in 'law.'
ö and ü are pronounced as in German.
gy is pronounced almost like *j* in 'jewel.'
ky is pronounced almost like *ch* in 'church.'
th is pronounced in some cases as in 'this,' in some cases as in 'thin.'
w after a consonant has the force of *uw*. Thus, *ywa* and *pwe* are disyllables, pronounced as if written *yuwa* and *puwe*.

It should also be noted that, whereas in Indian words the accent or stress is distributed almost equally on each syllable, in Burmese there is a tendency to throw special stress on the last syllable.

General

The names of some places—e.g. Calcutta, Bombay, Lucknow, Cawnpore—have obtained a popular fixity of spelling, while special forms have been officially prescribed for others. Names of persons are often spelt and pronounced differently in different parts of India; but the variations have been made as few as possible by assimilating forms almost alike, especially where a particular spelling has been generally adopted in English books.

NOTES ON MONEY, PRICES, WEIGHTS AND MEASURES

As the currency of India is based upon the rupee, all statements with regard to money throughout the *Gazetteer* have necessarily been expressed in rupees, nor has it been found possible to add generally a conversion into sterling. Down to about 1873 the gold value of the rupee (containing 165 grains of pure silver) was approximately equal to 2*s*., or one-tenth of a £; and for that period it is easy to convert rupees into sterling by striking off the final cipher (Rs. 1,000 = £100). But after 1873, owing to the depreciation of silver as compared with gold throughout the world, there came a serious and progressive fall in the exchange, until at one time the gold value of the rupee dropped as low as 1*s*. In order to provide a remedy for the heavy loss caused to the Government of India in respect of its gold payments to be made in England, and also to relieve foreign trade and finance from the inconvenience due to constant and unforeseen fluctuations in exchange, it was resolved in 1893 to close the mints to the free coinage of silver, and thus force up the value of the rupee by restricting the circulation. The intention was to raise

the exchange value of the rupee to *1s. 4d.*, and then introduce a gold standard (though not necessarily a gold currency) at the rate of Rs. 15 = £1. This policy has been completely successful. From 1899 onwards the value of the rupee has been maintained, with insignificant fluctuations, at the proposed rate of *1s. 4d.*; and consequently since that date three rupees have been equivalent to two rupees before 1873. For the intermediate period, between 1873 and 1899, it is manifestly impossible to adopt any fixed sterling value for a constantly changing rupee. But since 1899, if it is desired to convert rupees into sterling, not only must the final cipher be struck off (as before 1873), but also one-third must be subtracted from the result. Thus Rs. 1,000 = £100 $-\frac{1}{3}$ = (about) £67.

Another matter in connexion with the expression of money statements in terms of rupees requires to be explained. The method of numerical notation in India differs from that which prevails throughout Europe. Large numbers are not punctuated in hundreds of thousands and millions, but in lakhs and crores. A lakh is one hundred thousand (written out as 1,00,000), and a crore is one hundred lakhs or ten millions (written out as 1,00,00,000). Consequently, according to the exchange value of the rupee, a lakh of rupees (Rs. 1,00,000) may be read as the equivalent of £10,000 before 1873, and as the equivalent of (about) £6,667 after 1899; while a crore of rupees (Rs. 1,00,00,000) may similarly be read as the equivalent of £1,000,000 before 1873, and as the equivalent of (about) £666,667 after 1899.

Finally, it should be mentioned that the rupee is divided into 16 annas, a fraction commonly used for many purposes by both natives and Europeans. The anna was formerly reckoned as $1\frac{1}{2}$*d.*; it may now be considered as exactly corresponding to *1d.* The anna is again subdivided into 12 pies.

The various systems of weights used in India combine uniformity of scale with immense variations in the weight of units. The scale used generally throughout Northern India, and less commonly in Madras and Bombay, may be thus expressed: one maund = 40 seers; one seer = 16 chittaks or 80 tolas. The actual weight of a seer varies greatly from District to District, and even from village to village; but in the standard system the tola is 180 grains Troy (the exact weight of the rupee), and the seer thus weighs 2·057 lb., and the maund 82·28 lb. This standard is used in official reports and throughout the *Gazetteer*.

For calculating retail prices, the universal custom in India is to express them in terms of seers to the rupee. Thus, when prices change, what varies is not the amount of money to be paid for the

same quantity, but the quantity to be obtained for the same amount of money. In other words, prices in India are quantity prices, not money prices. When the figure of quantity goes up, this of course means that the price has gone down, which is at first sight perplexing to an English reader. It may, however, be mentioned that quantity prices are not altogether unknown in England, especially at small shops, where pennyworths of many groceries can be bought. Eggs, likewise, are commonly sold at a varying number for the shilling. If it be desired to convert quantity prices from Indian into English denominations without having recourse to money prices (which would often be misleading), the following scale may be adopted—based upon the assumptions that a seer is exactly 2 lb., and that the value of the rupee remains constant at 1*s.* 4*d.*: 1 seer per rupee = (about) 3 lb. for 2*s.*; 2 seers per rupee = (about) 6 lb. for 2*s.*; and so on.

The name of the unit for square measurement in India generally is the *bīgha*, which varies greatly in different parts of the country. But areas have always been expressed throughout the *Gazetteer* either in square miles or in acres.

MAP

IMPERIAL GAZETTEER OF INDIA

VOLUME XI

Coondapoor Subdivision (*Kūndapūr*).—Subdivision of South Kanara District, Madras, consisting of the COONDAPOOR and UDIPI *tāluks*.

Coondapoor Tāluk.—Northernmost *tāluk* of South Kanara District, Madras, lying between 13° 29′ and 13° 59′ N. and 74° 34′ and 75° 4′ E., with an area of 619 square miles. The population in 1901 was 131,858, compared with 131,546 in 1891. It contains 103 villages, including COONDAPOOR (population, 3,984), the head-quarters. The demand for land revenue and cesses amounted in 1903–4 to Rs. 3,12,000. The Western Ghāts form the boundary of the *tāluk* on the east, approaching in the north to within 6 miles of the sea. Three rivers rising in this range drain the greater part, and flow into a common estuary to the north of Coondapoor village. These river valleys, the islands in the estuary, and the adjacent low-lying levels are singularly fertile, as is the alluvial plain along the coast, which in places extends 4 or 5 miles inland. Fine crops of rice and sugar-cane are grown, and the coco-nut plantations are very productive. The interior and hilly portions of the *tāluk* contain much thick jungle, malarial fever is rife and labour scanty, and the ryots are much less prosperous than on the coast. In the north of the *tāluk* the catechu-tree is common, and the manufacture of cutch carried on by the Kudubi caste is an important item of forest revenue.

Coondapoor Village.—Head-quarters of the *tāluk* of the same name in South Kanara District, Madras, situated in 13° 38′ N. and 74° 42′ E., to the south of a large estuary into which three rivers run. Population (1901), 3,984. It was a port under the Bednūr kings, and in the sixteenth century the Portuguese settled here and built a fort. On a strong redoubt erected by Haidar now stand the office and residence of the divisional officer. Trade is at present principally carried on from Gangoli, which lies on the north bank of the estuary and is more favourably situated for shipping. On the sand-spit to the west of the town lies a small fresh-water reservoir containing a variety of fish

locally known as the 'flower-fish,' running up to three feet in length, which were especially reserved for Tipū's table during Mysore rule.

Coonoor Tāluk.—Eastern *tāluk* of the Nīlgiri District, Madras, lying between 11° 14′ and 11° 33′ N. and 76° 39′ and 77° E., and embracing the old divisions of Paranginād and Mekanād. It forms the Coonoor revenue subdivision. The area is 238 square miles, and the population in 1901 was 52,300, compared with 42,798 in 1891. The land revenue demand amounted in 1903-4 to Rs. 59,000. It contains the town of COONOOR (population, 8,525), the head-quarters, the cantonment at WELLINGTON, and 19 villages. Outside these towns and the small sanitarium of KOTAGIRI the villages are merely Badaga hamlets. The picturesque Kārteri falls, situated 6 miles south-west of Coonoor, supply the electric power used at the cordite factory at Aravanghāt 3 miles away. Lying to the east of Dodabetta, the *tāluk* receives more rain during the north-east monsoon than the rest of the District. The chief coffee-planting areas are in the neighbourhood of Coonoor and Kotagiri. On the extreme east and at Kotagiri are extensive tea estates. The *tāluk* also embraces the slopes of the hills on the Coimbatore side, in one of the villages among which are the Government gardens at BARLIYĀR.

Coonoor Town.—Town and sanitarium in the *tāluk* of the same name in the Nīlgiri District, Madras, situated in 11° 21′ N. and 76° 48′ E., 6,000 feet above the sea, at the south-east corner of the Nīlgiri plateau, and at the head of the principal pass from the plains. Up this *ghāt* runs a road (21 miles in length) and a rack railway (16¾ miles) from METTUPĀLAIYAM in Coimbatore District. The town is 345 miles by rail from Madras City, and 11 miles by road from Ootacamund. Population (1901), 8,525. There were 5,297 Hindus (chiefly Paraiyans), 898 Muhammadans, and 2,327 Christians, including a fluctuating number of Europeans. The place was constituted a municipality in 1866, and the municipal area is about 7 square miles. The income and expenditure during the ten years ending 1902-3 averaged Rs. 48,600 and Rs. 47,000 respectively. In 1903-4 they were Rs. 62,500 and Rs. 60,000, the principal sources of receipts being fees from markets, the taxes on houses and lands, and a contribution from Government. A water-supply scheme, estimated to cost Rs. 1,17,000, is being carried out by the council. Coonoor is the head-quarters of the divisional officer, and also contains a stationary sub-magistrate's court, a hospital, four places of worship (one Roman Catholic, one Church of England, and two of other denominations), many schools, a library, and shops and hotels for the convenience of Europeans visiting it. In the neighbourhood are several tea and coffee estates.

Coonoor is one of the principal sanitaria of the Presidency, and is perhaps second only to Ootacamund in natural advantages. The town

is built in one of the loveliest sites in India, on the sides of the basin formed by the expansion of the Jakatala valley, at the mouth of a great gorge, and surrounded by wooded hills. It possesses a cool and equable climate, the mean annual temperature in the shade being 62°. In the warmer months the thermometer ranges between 55° and 75°; in the colder weather between 38° and 68°. The annual rainfall averages 63 inches, distributed in normal years over ninety-one days. The rate of mortality is remarkably low, and no particular ailments can be said to be characteristic of the place. The town is well kept, but owing to the increase in the population the drainage is now in need of improvement. The European settlement is on the upper part of the plateau, and the native bazars in the valley below it. The place has about 20 miles of excellent roads, and several beautiful drives, along the sides of which grow hedges of roses, fuchsia, and heliotrope, and some of which command magnificent views of the precipitous sides of the deep valley up which the *ghāt* road climbs, the forests of its farther slopes, and a wide expanse of the plains shimmering in the heat 6,000 feet below.

Coorg.—A small British Province in Southern India, a picturesque highland country, situated to the west of the State of Mysore, on the summits and slopes of the Western Ghāts, and lying between 11° 56′ and 12° 50′ N. and 75° 22′ and 76° 12′ E. Its area, by revenue survey, is 1,582 square miles. Its greatest length from north to south is 60 miles, and its greatest breadth from east to west 40 miles. The shape of the country on the map has been compared to that of an infant's knitted sock, the heel pointing north-west and the toe south-east. A narrow arm, about 12 miles long by 6 wide, projects northwards into Mysore. The plateau of Mercāra is 3,809 feet above sea-level at the fort, and may be said to extend as far as Somvārpet, 26 miles north, with an average altitude of 3,500 feet, but slopes down to the Cauvery on the east, and near Fraserpet descends to 2,720 feet. Coorg is bounded on the north and east by the Hassan and Mysore Districts of Mysore; and on the south and west by the Malabar and South Kanara Districts of Madras.

The correct form of the name is Kodagu, of which Coorg is an anglicized corruption. It is said to be derived from a Kanarese word *kudu*, meaning 'steep' or 'hilly.' The Coorg people are called Kodagas. In the Coorg language the country is Kodavu and the people Kodavas.

Physical aspects.

Coorg proper, which occupies the whole area south of the Hatti or Hārangi river, is covered with forest, save where the clearing for a coffee plantation or other cultivation, or the open glades (*bāne*) with their beautiful greensward and varied foliage, lend a charming variety to the landscape. In vain, however, would the eye search for towns and villages, or other indications of civilized life. Only here and there in nooks and

corners, ensconced among groves or clusters of cultivated trees, and betrayed by a wreath of smoke, can one discover the thatched houses of the Coorgs, who love a secluded abode near their fields. In general the summits of the hills are covered with coarse grass, the valleys with evergreen forest, and the mountain-sides with woods in the hollows, through which flow streams and rivulets. But the appearance of the country varies considerably in different parts. In the vicinity of Somvārpet in the north the hills are gently rounded, alternating with sloping glades interspersed with clumps of forest trees, resembling the finest park scenery in Europe. Near Mercāra the hills are closer together and more abrupt, and the ravines deeper and more wild. Towards Fraserpet the country assumes the champaign character of the Mysore plateau, with scattered solitary hills. In the direction of Vīrarājendrapet, especially in Beppunād and Kadyetnād, the country is open, the woods are neither dense nor high, and beautiful grassy downs rise from extensive rice valleys. The eastern frontier, between the Cauvery and Lakshmantīrtha rivers, presents an almost uninterrupted jungle, deciduous in character. West of this the forest is evergreen, largely intermixed with bamboo, forming what is known as the Bamboo district.

The main range of the Western Ghāts extends from Subrahmanya in the north-west to the western point of the Brahmagiris in the south, or for more than sixty miles. From this backbone several long and elevated ridges run from west to east. The grand mountain mass of Subrahmanya or Pushpagiri rises to 5,626 feet above sea-level; and among the many ridges branching off from this part of the Ghāts the most remarkable is the one which attains its greatest height in the double-peaked Kotebetta (5,375 feet), 9 miles north of Mercāra. Near Mercāra the Bengunād range starts west to the Ghāts, forming an acute angle with them. At this point is Brahmagiri, the source of the Cauvery river, and north of it is the Sampaji valley through which descends the road to Mangalore on the west coast. Continuing on the line of the Ghāts, which runs south-east from here, the most prominent peaks are the well-wooded Tumbemale, Iggutappa Devarabetta or Iggutappakundu, Tadiandamol (5,729 feet), and Somamale. Some distance to the south is the Periambadi *ghāt* road to Cannanore and Tellicherry on the west coast. In the extreme south-west lies the Marenād range, with the great lateral ridge of the Brahmagiris, which form the southern boundary of the country, separating it from the Wynaad. The highest point in these is Davasibetta (4,500 feet), which towers up from a beautiful plateau called Huyālemale. To the west are conspicuous points called Hanumānbetta and Perumālemale. Many spurs from the Brahmagiris branch off over the whole of Kiggatnād, producing a ramification of narrow-ridged hills, some ascending

in almost solitary grandeur, like Ambatebetta near Vīrarājendrapet, Bittangala, Kundadabetta, Siddesvarabetta, and Maukalbetta, others subsiding into the undulating slopes of the eastern elevations, enclosing innumerable rice-fields, some of which are the most extensive in Coorg. The Bengunād range also extends eastwards in two ridges south of Mercāra. One culminates in the pointed peak of Nūrokkal-betta, the other takes a zigzag line towards Fraserpet, its highest point being Kallūrbetta, clothed with teak forest. From Kotebetta northwards run the Sānthalli hills, terminating in the bluff Mukribetta. From the northern frontier a range runs south to the Cauvery, in which are the fine conical peak of Mālambi (4,488 feet) and the Kānagālu hill.

The chief river of Coorg is the Cauvery, which rises at Tale-Kāveri in Brahmagiri in the Western Ghāts. It flows east-by-south across the country to Siddapur. From here it turns north-by-east and forms the eastern frontier as far as Sirangāl, where it diverges into Mysore. Its important tributaries, the Hemāvati and Lakshmantīrtha, drain respectively the north and south of the country. The Hemāvati forms the extreme northern boundary between Coorg and Mysore, and runs east into the latter. The Lakshmantīrtha rises in the Brahmagiri hills on the southern frontier, and runs north-east through Kiggatnād into Mysore. Within Coorg the Cauvery receives from the south the Kakkabe from Tadiandamol, the Kadanurhole in Beppunād, and the Kummehole in Yedenālknād; from the north the Muttarmudi, which collects the drainage south of the Mercāra ridge, and the Chikkahole, that of Horūr-Nūrokkalnād. North of Fraserpet it receives from the west the Hatti or Hārangi, into which fall the streams that drain the north-west: namely, the Kakkehole from Somvārpet, the Choranhole from Sānthalli, and the Mādapur and the Hattehole from Kotebetta. The only important stream flowing to the west is the Barapole in the south-west, which descends to Malabar. Another, called the Sārat, is said to form falls with a clear drop of 434 feet. During the monsoon months (June, July, and August) the rivers are generally in full flood, and can be crossed only with the aid of ferry-boats. After the monsoon they fall rapidly, and during the hot season are fordable on foot. They are not navigable, and are little used for irrigation, which is rendered unnecessary by the copious rainfall and the multitude of small rivulets rising in the wooded ravines.

There are no lakes, nor any tank of important size, but some tanks exist in the Nanjarājpatna *tāluk*. In Kiggatnād the streams in certain places form, during the rains, considerable sheets of water called *kolli*. In the hot season these dry up, leaving only a few pools here and there.

The Coorg mountains consist of the metamorphic class of rocks: gneiss, syenite, and mica schist. Near Mercāra is found clay-slate or

argillaceous schist of coarse variety. Amorphous limestone occurs at Bollur near Fraserpet, sufficient for nearly all local building purposes. Along with it are found nodules of magnesite. Laterite appears sporadically in almost all parts. Iron ore occurs widely in cylindrical root-like lumps. Attention has lately been directed to the handsome purple norite, forming large hill masses in south-western Coorg, which takes a fine polish, and would be valued as an ornamental stone. The Coorg rock is an unusual type, and if it were within range of any European port would before this have been distributed as widely as the Peterhead granite. The Periambadi *ghāt* road winds through the hills of this rock, leading down in a distance of about 35 miles to the port of Cannanore, which would form a convenient centre for its distribution. It is more due to local ignorance and want of enterprise than to any intrinsic superiority on the part of foreign stone that the latter now replaces the indigenous varieties.

The flora of Coorg is typical of the prevailing vegetation throughout the Western Ghāts. The all-pervading forest is distinguished by the people as Male-kādu (evergreen mountain forest) and Kanave-kādu (deciduous forest at the lower levels of the passes). Arborescent growth at the highest elevation, 3,500 to considerably over 5,000 feet, is mostly represented by *Polyalthia coffeoides*, *Calophyllum tomentosum*, *Canarium strictum*, *Vateria indica*, *Ochrocarpus longifolius*, *Michelia Champaca*, and a host of others. On the exposed summits of the mountains are such plants as *Anagallis arvensis*, *Anaphalis* in several species, *Vernonia*, *Blumea*, and *Senecio*, each in many species. *Anemone rivularis*, *Ranunculus diffusus*, *Strobilanthes*, and *Exacum* in several species skirt the woods or *sholas*. Grasses and sedges are represented by *Arundinella agrostoides*, *Coelachne pulchella*, and numerous others. A few hardy ferns are found in the open; but in woods and on the banks of streams are *Alsophila latebrosa*, *Angiopteris evicta*, *Osmunda regalis*, *Adiantum*, *Aspidium*, and *Asplenium* in many species, *Polypodium ornatum*, and many others. *Pteris aquilina* is often gregarious. Species affecting trees and rocks include *Asplenium planicaule*, *Botrychium virginicum*, and others. The club-moss (*Lycopodium phlegmaria*) is plentiful in the damp woods, on the outskirts of which orchids (*Dendrobium*, *Aerides*, *Cymbidium*, *Eria*, and others) also occur. Shrubby, climbing, and herbaceous plants are everywhere abundant—*Barleria Gibsoni*, *Memecylon edule*, *Melastoma malabathricum*, and many others. The introduced *Lantana Camara* is spreading aggressively in many parts.

Elephants range through all the wooded parts, but especially towards the eastern frontier. They are not so numerous as formerly, when periodical hunts were held. An inscription by the last Rājā states that from July, 1822, to April, 1824, he killed 233 and caught 181. They

may now be killed only under licences granted by the Commissioner. Since 1902 systematic arrangements have been made in the Forest department for their capture. Bison frequent the densest forests and highest hills, especially in Marenād and Hormalnād. Tigers, leopards, and bears are not uncommon, the last being found chiefly in the north-west. The tiger-cat, black jungle-cat, and civet-cat are common, as well as the loris. Otters are found on the banks of the Hatti and other streams. The wild dog hunts in packs. *Sāmbar*, spotted deer, and barking-deer are general in woods. Monkeys include the black wanderoo, the grey Hanumān, and the brown, the last caught and eaten as a great delicacy. One of the largest birds is the hornbill. Vultures, kites, and other birds of prey are common, and parrots, pigeons of various kinds, and water-fowl abound. Peafowl are sacred, but jungle-cock feathers are much prized. Snakes are plentiful, the cobra especially haunting the bamboo tracts. The venomous black snake is found in dense forests. Crocodiles occasionally appear in the Cauvery near Rāmaswāmi Kanave. The best fish in size and quality is the lady-fish, or 'plantain-fish' as the Coorgs call it. Mahseer are found in the Cauvery and other rivers: one was recently caught weighing 104 lb. Among other varieties are the black cat-fish, the black murl, the black dhok, and numerous little fishes in the paddy-fields when flooded. Insects are innumerable. The display of fireflies just before the monsoon is a sight not to be forgotten. The coffee-borer is a dreaded enemy of the planters. Leeches are a source of constant distress in the jungles, especially in the wet season.

The climate of Coorg is temperate and humid; but those who accompanied Tipū Sultān seem to have found it trying. His historian writes:—

'A description of the cold here makes the pen, before it begins to write, stiff as if it were plunged into the frozen sea, and the tongue of truth at describing the temperature is with fear and astonishment congealed like ice, notwithstanding it is covered with the *posteen* (fur cloak) of the lips, what can it say therefore? . . . This, however, is the description of the summer. God protect us from the winter and rainy seasons.'

The annual rainfall at Mercāra during twenty-five years ending 1901 averaged 133 inches. The wettest month is July, with 42 inches; then June and August, with 29 inches each. September and October have 12 inches and 9 inches, May 6 inches, April and November 3 inches each. The other months have less than one inch.

The temperature for the same period at Mercāra was: in January, mean 67°, diurnal range 21°; in May, 73° and 16°; in July, 66° and 7°; in November, 67° and 18°.

The Purānic account of Coorg is contained in the Kāveri Māhātmya,

which describes the origin of the river Cauvery (properly Kāveri) and the country in which it rises. Kāveri derives her name from the *muni* Kavera, to whom she was given as a daughter by Brahmā [1]. In order to bless her father and the world, she resolved to become a river. But the sage Agastya saw her and asked her to be his wife. To this she consented on the condition that she should be free to go if he ever left her alone. One day he went to bathe in the river Kanake, forgetful of the promise, and Kāveri, left alone, plunged into his holy tank and flowed forth a beautiful river. The disciples tried to stay her course, on which she went underground. At Bhāgandakshetra she appeared again [2] and flowed on towards Valamburi. Agastya, on his return, dismayed at what had happened, ran after her, begging for forgiveness, and imploring her to return. Loath either to change her mind or to grieve Agastya, she divided herself, one half flowing off as a river, the other half staying with the sage.

History.

The Coorgs, according to this Purāna, are Ugras by descent, denoting the offspring of a Kshattriya father by a Sūdra wife. The Kshattriya was Chandravarma, the youngest son of Siddhārtha, king of the Matsya country. From his name and other coincidences he was probably a Kadamba prince. The Kadambas had as their capital Banavāsi, north-west of the Mysore State [3]. Matsya is the name of king Virāta's city in the Mahābhārata, identified with Hāngal in Dhārwār. After a pilgrimage to holy places in the south, Chandravarma came to Brahmagiri (at the source of the river) and propitiated the goddess Pārvatī, who bestowed on him a kingdom there and provided him with a Sūdra wife, by whom he had eleven sons. She also promised to bless the country by appearing in it as the river Kāveri. The sons, brought up as Kshattriyas, in their turn obtained as wives the hundred daughters born of Sūdra mothers to the king of Vidarbha (Berār). Chandravarma, having crowned his eldest son Devakānta as his successor, departed, predicting that Pārvatī would soon appear as the river. Each of the princes had more than a hundred sons, and they spread themselves over the country, levelling and bringing it into cultivation to a distance all round of five leagues. Their tearing up of the ground being like the work of wild boars, the country was called the Kroda-desa or 'boar country,' from which arose the name Kodagu.

Two days before the Tulā sankramana (the time of the sun's entering the sign of Libra), Pārvatī appeared in a dream to king Devakānta,

[1] Her original name was Lopamudrā, and she was brought up in the palace of the king of Vidarbha (Berār), whose daughter she was reputed to be.

[2] The Kāveri and Kanake, of which the former runs underground for some distance, unite at Bhāgamandala (Bhāgandakshetra).

[3] Kadambas were ruling in Manjarābād to the north of Coorg, and in the Wynaad to the south of it, in the eleventh century, as shown by inscriptions.

and directed him to assemble all his people at Valamburi. There accordingly the whole tribe presented themselves. The river then came rushing down the valley, and the assembled Coorgs bathed in the fresh flood. The violence of the stream twisted the knots of the women's cloths round to their backs; and the Coorg women wear them in that fashion to this day, in remembrance (says the Purāna) of the first bathing of the Coorgs in the waters of the Cauvery at Valamburi. Since that day the Coorgs assemble each year in the month of Tulā (October–November), to celebrate the great festival of their tribe in honour of Kāveri.

Coming to historical times, we find from inscriptions that Coorg (as well as Bayalnād or the Wynaad) in the ninth and tenth centuries was included in the kingdom of the Gangas, whose capital was at Talakād on the Cauvery in the south-east of Mysore, and who ruled over the Mysore country from the second century to the eleventh [1].

Under them were the Changālvas or kings of Changa-nād, who later called themselves kings of Nanjarāyapatna or Nanjarājapatna. This place lies north of the Cauvery in Coorg, near the point where the river becomes the common boundary of Coorg and Mysore, and still gives its name to the northern *tāluk* of Coorg. The Changālvas first appear in connexion with Panasoge or Hanasoge, south of the Cauvery in the Yedatore *tāluk* in Mysore. Their territory included the Hunsūr *tāluk* in Mysore, as well as the east and part of the north of Coorg. Their inscriptions have been found in both Yedavanād and Bettyetnād. They were originally Jains, and their priests claim exclusive authority over the Jain temples from Hanasoge to Tale-Kāveri, which perhaps indicate the limits of the kingdom east and west.

The Ganga power was overthrown by the Cholas from the Tamil country, who captured Talakād at the beginning of the eleventh century, and claim to have conquered among others the Kudu (or Coorg) country. The Changālvas now became feudatory to the Cholas, who, in accordance with their usual policy, imposed upon them Chola names. Nanni Changālva, with the prefix Rājendra Chola, seems to have been an important king in the eleventh century.

North of the Changālvas were the Kongālvas, who during the eleventh century ruled over the Arkalgūd *tāluk* in Mysore and the Yelusāvira country in the north of Coorg, under the Cholas. They also were Jains, and their kingdom may previously have been called Kongal-nād.

The Cholas were expelled from Mysore early in the twelfth century,

[1] The adjoining State of Punnāta (occupying the south-west of Mysore District), whose capital was Kitthipura (now Kittūr on the Kabbani), can be traced back to the fourth century B.C., and is mentioned by Ptolemy in the second century A.D. It was subsequently absorbed into the Ganga kingdom.

when Talakād was retaken by the Poysalas or Hoysalas, who had been rising to power in Mysore since the Ganga kingdom came to an end. Their capital was Dorasamudra (Halebīd in Hassan District), but they originally came from Sosevūr, in the Western Ghāts, identified with Angadi in the Mudgere *tāluk* of Kadūr District. They bore the title of 'champion among the Malapas' or hill chiefs. An inscription in Coorg of 997 mentions four Malapas. But the former may have included the Danāyaks of Kote or Bettadakote on the Gopālswāmi hill in the south of Mysore District, who claim at about this time to have overrun a territory extending from Davasibetta (the southern point of Coorg) in the south to Goa in the north, and from Satyamangalam (on the Bhavāni in Coimbatore) on the east to the Bisale *ghāt* (the north-west of Coorg) on the west. These limits evidently embrace Coorg. But the power of these Danāyaks soon came to an end, as well as that of the Kongālvas.

Between the Hoysalas and the Changālvas, however, several fights took place before the latter were subdued. They claimed, equally with the Hoysalas, to be Yādavas and of the Lunar race, and held out for independence when their overlords the Cholas had been removed. By 1145 the Hoysala king Nārasimha I had slain the Changālva ruler in battle, and captured his elephants, horses, gold, and new jewels. After this the Changālvas appear to have retired into Coorg, for in 1174 Ballāla II sent his general Bettarasa against them in Pālpare, a fort whose ruins are at Hatgatnād in Kiggatnād. The Changālva Mahādeva was crushed, and Bettarasa built a city there as his seat of government. But Changālva Pemma-Vīrappa, joined by Būdaganda Nandideva, Udeyāditya of Kurache, and others, 'the Kodagas of all the *nāds*,' marched against Pālpare and attacked Bettarasa, who seems to have got the worst of it at first, but was finally victorious. This is the earliest express mention of the Coorgs by name that has been met with in inscriptions. The subjection of the Changālvas after this seems to have been complete, and in 1252 the Hoysala king Somesvara paid them a visit at Rāmanāthpur (to the north of the Cauvery in the Arkalgūd *tāluk*). Their capital was then Srīrangapatna (known as Kodagu Srīrangapatna), south of the Cauvery near Siddapur. During this period the Changālvas, like others of the old Jain rulers, had changed their religion and adopted the new Lingāyat creed established in the twelfth century. Their family deity now was Annadāni Mallikārjuna on the Bettadpur Hill (in the Hunsūr *tāluk*), which they called Srīgiri.

To the Hoysalas succeeded the Vijayanagar empire in the fourteenth century, and the Changālvas passed under its supremacy. They were among the southern principalities controlled by the viceroy at Seringapatam called the Srī Ranga Rāyal. In the beginning of the sixteenth

century Nanja Rājā founded their new capital of NANJARĀJAPATNA. In 1589 Piriya Rājā or Rudragana rebuilt Singapatna and named it after himself PIRIYĀPATNA, the Periapatam of the English histories. After the power of Vijayanagar had been broken by the Muhammadans in 1565, the authority of the viceroy began to decline. In 1607 he endeavoured to anticipate events by confirming the Malalavādi country (Hunsūr *tāluk*) to Rudragana, in order that the worship of the god Annadāni Mallikārjuna should not fail as long as the Nanjarājapatna kings of the Changālva family continued. But in 1610 the viceroy had to withdraw in favour of the Mysore Rājā, who took possession of Seringapatam and made it his capital. And in 1644 Bettadpur and Piriyāpatna were captured by Mysore. The king Nanjunda Rājā had retired from the world; but his son Vīra Rājā fell in the defence of his capital, after putting to death his wives and children on seeing that his situation was desperate, and the rule of the Changālvas was at an end.

Firishta states that at the end of the sixteenth century Coorg proper was governed by its own chiefs, called Naiks, who admitted the supremacy of Vijayanagar; but they seem to have been often at feud with one another. According to tradition the country was divided into twelve *kombus* and thirty-five *nāds*. The conquest of the Changālvas by Mysore was not followed up by the acquisition of Coorg. According to the native history, the Mysore army advanced to Pālpare and was there defeated with great slaughter. But as the event is placed in a reign some thirty years later, the statement seems unentitled to credit. Mysore had enough to do elsewhere to defend itself against Sivappa Naik of Bednūr, who was overrunning all the west, and in 1646 even laid siege to Seringapatam, ostensibly for the purpose of restoring the authority of the fugitive Vijayanagar king who had taken refuge with him. The way thus lay open for occupation by some one of the late Changālva territory in Coorg.

This was effected by a prince of the Ikkeri or Bednūr family, who settled at Hāleri, north of Mercāra, in the garb of a Jangama or Lingāyat priest, and ended by bringing the whole country under his authority[1]. His descendants continued as Rājās of Coorg till 1834. Their history to 1807 is contained in the *Rājendranāme*, compiled in Kanarese under the orders of Vīra Rājendra, the most distinguished of the line, and translated for him into English by Lieutenant Abercromby in 1808 at Mangalore. But the earlier dates, for some political reasons, have been distorted.

Muddu Rājā removed the capital to Madikeri or Mercāra, where he built the fort and palace in 1681. Of his three sons, Dodda Vīrappa, the eldest, succeeded him at Mercāra, while Appāji Rājā and Nanda

[1] It is not unlikely that he was in some way related to the Changālvas.

Rājā, the second and third, settled at Hāleri and Horamale. When in 1690 Mysore under Chikka Deva Rājā invaded the Belūr territory, which included Manjarābād, Dodda Vīrappa seized the Yelusāvira country for Coorg. He was allowed to keep this on paying half the revenue to Mysore, whence it came to be called Itterige, or 'paying tax to two parties.' He also, by assisting the Chirakkal Rājā against Somasekhara Naik of Bednūr, gained the district of Amara Sulya on the north-west. He died in 1736, at the age of seventy-eight. His only son had lain in prison for twelve years until his death in 1729. But Chikka Vīrappa, the son of the latter, who was imprisoned with him, had been appointed to succeed to the throne, and was now placed on it. During his reign Haidar Alī rose to power in Mysore, and, after his conquest in 1763 of Bednūr and its territories, considered himself the liege lord of Coorg. But he first claimed Yelusāvira, and then granted Uchingi to Coorg in consideration of a payment of 3 lakhs of pagodas.

There being no heir to Chikka Vīrappa the succession passed to the two other branches, and Muddu Rājā and Muddaiya, representing the Hāleri and Horamale branches, ruled together in harmony. Haidar, having held back from his promised cession of Uchingi, was forced to give up Panje and Bellāre instead. The joint kings died in the same year, 1770. Muddu Rājā left a son Appāji, whom his father's brother Linga Rājā wished to place on the throne, but Muddaiya's son Mallaya put forward his own son Devappa Rājā, who was accepted. On this, Linga Rājā fled to Haidar for help, taking with him his son Vīra Rājā and his nephew Appāji. Haidar was too much occupied in opposing the Marāthās to do anything immediately. But on their retirement, Linga Rājā was sent with an army, and being joined by many Coorgs, marched without opposition to Mercāra, the capital[1]. Devappa Rājā sought refuge with the Chirakkal Rājā of Kote, but meeting with a poor reception, fled north in disguise, with only four attendants. He was captured at Harihar and sent to Seringapatam, where his family already lay in prison, and was put to death together with them. This was the end of the Horamale branch. Haidar now offered Coorg to Linga Rājā on condition of paying tribute, and allowed him to occupy a part of the Wynaad, at the same time depriving him of Amara Sulya, Panje, Bellāre, and Yelusāvira. On Linga Rājā's death in 1780, Haidar assumed entire possession of Coorg, under pretence of being guardian to his sons until they should come of age. Meanwhile they were to reside at the fort of Gorūr, on the Cauvery, in the Arkalgūd *tāluk* of Hassan District of Mysore. A former Brāhman treasurer of the Coorg

[1] Wilks's account is that, in order to open a direct route to Malabar, Haidar suddenly invaded Coorg, and offered a reward of 5 rupees for each head brought before him. After about seven hundred had been paid for, he was struck with the handsome features and relented, ordering the decapitation to cease.

Rājā was appointed governor, and a Musalmān garrison held the Mercāra fort.

The Coorgs were greatly incensed at the abduction of their princes from the country, and at Brahmāns lording it over them. They therefore broke into rebellion in June, 1782, and drove out the Musalmāns. Haidar was engaged in war with the British in the Carnatic, and his death soon after prevented immediate retribution; but Tipū Sultān, his son, was fully determined on the reconquest of Coorg. He removed the family of the Coorg Rājās to Piriyāpatna, and when he had retaken Nagar, and reduced Mangalore in 1784, marched through Coorg to Seringapatam. After denouncing the Coorgs as guilty of polyandry, and for their rebellions, he said he would forgive them this once, but if they rebelled again he vowed that he would honour every man with Islām and banish them from their country. Scarcely had he left, when they again took up arms in 1785 and repossessed themselves of their native hills. A force sent to put them down was driven back, on which Tipū himself marched into Coorg with an army. Having allured most of the Coorgs to meet him at Tale-Kāveri, under pretence of peaceable intentions and conciliatory measures, he suddenly seized them, and, hunting out their families, drove them, altogether about 70,000 souls, like a herd of cattle to Seringapatam, where all the males were forcibly circumcised. Coorg itself was partitioned among Musalmān landlords, to whom the slaves of the country were made over, and additional labour provided from Adoni in Bellary District. The only condition laid on the new owners was that they were to search out and slay all such Coorgs as might have escaped his vengeance, as he was resolved on their extermination. The country was held by garrisons in four forts, at Mercāra (Jāfarābād), Fraserpet (Kushālnagar), Bhāgamandala, and Beppunād; and on account of the accessions he had made to the faith, Tipū now assumed the title of Bādshāh.

Such was the state of affairs when in December, 1788, Vīra Rājā or Vīra Rājendra Wodeyar, accompanied by his wife and his two brothers Linga Rājā and Appāji, effected his escape from Piriyāpatna, after a confinement of six years. The Coorgs rallied round him, and before long he had possessed himself of the whole country; the large force sent against him by Tipū being diverted to the western coast owing to a revolt of the Malayālam Rājās. The British, foreseeing the strategical value of Coorg in the impending struggle with Tipū, now entered into treaty with Vīra Rājā, who was sorely in need of a powerful ally. Tipū in vain strove to entice him back. Vīra Rājā assisted the Bombay army on its march to Seringapatam with supplies, procured by wholesale plunder of the neighbouring territories. On the night in February, 1792, when Lord Cornwallis drove Tipū back into Seringapatam and the British occupied the island, 5,000 Coorgs

who had been carried away by Tipū with their wives and children, altogether some 12,000 souls, made their escape in the confusion and regained their native country. Tipū was forced to agree to the terms offered by the British, one of which was the surrender of half his dominions adjacent to the Company's possessions. Coorg was in danger of being sacrificed, but the Governor-General demanded its cession also, in order to save Vīra Rājā from Tipū's vengeance. So enraged was Tipū at this, that he was about to break off the treaty, saying—'To which of the English possessions is Coorg adjacent? Why do they not ask for the key of Seringapatam?' But he was forced to give way, and Coorg remained a firm friend of the British. On the spot where the Rājā had first met the British commander, General Abercromby, he founded Vīrarājendrapet, now the second place in Coorg. Tipū made more than one futile attempt to get him assassinated. In 1796, having no son, he married a second time. In the final war with Tipū the Rājā again rendered effectual aid in supplies and transport to the Bombay army. He was witness of the British defeat of Tipū at Siddesvara, and his own forces laid waste the enemy's possessions around Coorg in the Tulu and Mysore countries. On the fall of Seringapatam in 1799 he received some of the trophies, but was disappointed in not being allowed to retain the Piriyāpatna country. He obtained, however, Panje and Bellāre in South Kanara. Though he had daughters by his second marriage he still had no son. In 1807 his wife died, and his hopes of an heir were extinguished. His mind was unhinged, and he became subject to paroxysms of sanguinary rage, in which he ordered executions and massacres for which he was filled with remorse when he recovered. He had surrounded himself with an African body-guard, who were ready executioners, and eunuchs from Mysore had charge of the female apartments. But the guards of the palace and the military officers were Coorgs. These, no longer able to bear the yoke, conspired to put him to death. But having got warning of it at the last moment, he with great presence of mind, as Haidar had done on a similar occasion, placed the bolster in the bed covered with a blanket and got out of the way. The conspirators rushed in and cut at what they mistook for the sleeping Rājā, and were paralysed to find he had escaped. He at once summoned his African Sīdīs, and shutting the fort gates, entrapped three hundred Coorgs, who were massacred to a man, the Rājā himself shooting down twenty-five from a window. He was now in fear that he might lose the good opinion of the British. He wrote to the Governor-General informing him of the death of his Rānī, and of his desire to have the succession to the throne settled on his four daughters or their male issue, in order of their seniority; but an answer was long in coming. Feeling that his end was approaching, and maddened with concern for the safety of his

daughters if he should die, he sent executioners to put his two brothers to death; but coming to himself again, he dispatched messengers to countermand the order. They were too late in the case of Appāji, the younger one, but were in time to save Linga Rājā. The Resident in Mysore (the Hon. Arthur Cole) now visited Coorg to report to the Governor-General on the legality of confirming the crown in the female line, and the Residency Surgeon (Dr. Ingledew) attended the Rājā with reference to his mental malady, which was leading him to attempts at suicide. At length, on June 9, 1809, he sent for his beloved daughter Devammāji, gave his seal into her hands, and shortly after expired. Devammāji, though under age, was now acknowledged as Rānī of Coorg, and the Sode Rājā, who was married to the late Rājā's daughter by his first wife, continued to act as Dīwān.

Meanwhile Linga Rājā gained the support of the Coorgs to his claim as regent instead of the Sode Rājā, who was induced to retire to his own country. This step having received the recognition of the British Government, who were averse to interfering with what were supposed to be the wishes of the Coorgs, the next step was that Linga Rājā induced the Rānī to sign an abdication of the throne in his favour. The British Government postponed any action in the matter until she should come of age, but sent her a gold bracelet originally intended for her father. In 1811 Linga Rājā announced that he had permanently assumed the government. He also set himself to get hold of the large sums invested at Bombay and Madras in the name of Devammāji by her father. The Governor-General ruled that they must be considered state funds, the interest of which might be paid to Linga Rājā as guardian of Devammāji and regent of Coorg. Linga Rājā died in 1820, aged forty-five. He was not wanting in some governing ability, for he strengthened all the fortifications, and carried out a systematic survey of the lands; but he had reduced the people to a state of abject slavery by a rigid system of terror of which no hint was allowed to be heard outside the country. His wife, full of fear for her future, committed suicide, and was buried with him.

His son Vīra Rājā, who was about twenty years old, succeeded. His first act was to put to death all who had displeased or thwarted him in his father's lifetime. One Channa Vīra escaped to Mysore, but was arrested and sent back on Vīra Rājā's application for him as an escaped criminal. The Rājā was grossly sensual and most sanguinary in his rule. In 1826 the Resident in Mysore visited Coorg in order to inquire on the spot into the continual executions that took place, but was studiously misled. In 1832 a Coorg named Channa Basava, and his wife, the Rājā's sister[1], escaped to him for refuge, and implored the protection of the British. The Rājā demanded that the fugitives

[1] She survived till lately, and died in 1903 at the age of ninety-four.

should be delivered up to him, which was refused, and the Resident again went to Coorg to confer personally with the Rājā. He found him much changed since the last visit, and ill at ease, owing to treasonable projects in which he had been engaged. The Resident left him with a hint that disobedience to the orders of the British Government might be punished with deposition [1]. But the Rājā did not reform. Devammāji, the daughter of Vīra Rājendra, was murdered, as well as all surviving members of the families of his predecessors. As his disaffection openly increased, it was proposed to quarter troops near Mercāra, but the British Government was unwilling to go to extremities. The Rājā, however, precipitated events by insolent letters to the Governor of Madras and the Governor-General. The latter, Lord William Bentinck, therefore ordered a British force to Coorg in 1834 to depose him. On this he issued an abusive proclamation against the British. The force, which marched in four columns from different sides, met with little serious opposition at most of the stockades, and entering Mercāra, hoisted the British flag there on April 6. The Rājā, who had retired to Nalknād with his women and treasures, had not the courage to face the invaders.

On April 11, Colonel Fraser, the Political Agent with the force, issued a proclamation that 'the rule and dominion of Rājā Vīra Rājendra Wodeyar over the country of Coorg had now definitively and for ever ceased.' The Coorgs breathed freely when they found that he was not to remain in the country, and unanimously voted to be placed under the British Government. The annexation was accordingly proclaimed on May 7, 1834. The Rājā was deported to Vellore, and was subsequently allowed to live at Benares. In addition to his pension, he demanded the payment to him of the capital, originally the inheritance of Devammāji, of which the interest had continued to be paid to the Coorg Rājās. In 1852 he obtained leave from Lord Dalhousie to visit England with his favourite daughter Gauramma, then ten years old, in order to give her a European education. Arrived there, he expressed a wish to have her brought up in the Christian faith. Queen Victoria took an interest in the Indian princess, and at her baptism, on June 30, 1852, stood sponsor through the Archbishop of Canterbury, and gave her the name Victoria. Feeling himself strong in the royal favour, the ex-Rājā commenced a Chancery suit against the East India Company for the recovery of nearly 7 lakhs invested for Devammāji, as previously described. The suit dragged on a weary course till in 1858 the Government of India was transferred to the Crown, and his suit failed. The Coorg princess was carefully brought up, and eventually married

[1] There was the example of Mysore before him, where the Rājā had been recently deposed for his persistent misrule.

a British officer, but the union was not a happy one, and she died in 1864. Her husband and child afterwards mysteriously disappeared, and were never heard of again. Vīra Rājā had died the year before, and was buried in Kensal Green Cemetery in London.

A pretender named Vīrappa had appeared in 1833, who professed to have escaped when the other members of the family were destroyed in 1820. After the annexation, under the guise of a *sannyāsi* named Abhrāmbara, he carried on intrigues which at the time of the rebellion led to his arrest and detention in jail at Bangalore. He died in 1870. The so-called Coorg rebellion of 1837 was a rising of the Gaudas, who occupy the western slopes of the Ghāts and resemble the Coorgs in many of their habits. Their grievance was that in the districts of Amara Sulya, Puttūr, and Bantwāla, which by the wish of the inhabitants had been re-transferred to Kanara, they were required to pay in cash the assessment which they had been paying in kind according to the custom in Coorg, thus driving them into the hands of money-lenders. A riot took place at Mangalore, where the prisoners in jail were let out, the offices and some civilians' houses burnt and looted. A rising of the Coorgs had also been planned, and the pretender gave out that a great prince of the Hāleri house was about to take possession of his inheritance. But the whole thing was soon brought to an end by the Coorgs themselves, and the loyal tribesmen received rewards and the Coorg medal. In 1861, after the Indian Mutiny, the Coorgs for their loyalty were exempted from the Disarming Act.

Under the freedom of British rule Coorg has prospered. To its connexion with Mysore it doubtless owes its recognition as a separate Province under the Government of India. The Commissioner of Mysore was also appointed Commissioner of Coorg; and an officer of the Mysore Commission, with the title of Superintendent of Coorg, had his head-quarters at Mercāra, except during the monsoon, when they were at Fraserpet. In 1869 the Commissioner was styled Chief Commissioner, and the Superintendent of Coorg afterwards became Commissioner. On the rendition of Mysore to the Native government in 1881, the Chief Commissioner became Resident in Mysore and Chief Commissioner of Coorg.

In the recent history of Coorg the most material change has been brought about by coffee cultivation. Probably introduced by Moplahs near Nalknād, who concealed their success, it was encouraged by Captain Le Hardy, the first Superintendent of Coorg, so that most native houses had a few plants. But when Europeans took it up, it soon became the main industry of the country. The first European plantation was opened at Mercāra in 1854. Others followed in different parts, and by 1865 there was a general rush, in the belief that coffee-planting was a sure and easy road to fortune. Lands were to be had,

either from Government for the mere asking, or by purchase from native holders. Fine forests fell under the planter's axe. Lakhs were spent in expectation of a cent. per cent. return. But in this too rapid extension losses by the attacks of certain insects and other natural enemies had to be contended with. Nevertheless a considerable body of European planters had been established throughout the country. Coorgs, too, entered into the race for wealth. The demand for labour completely freed men formerly enslaved, and also attracted thousands of coolies from Mysore and other parts. In short, the whole aspect of the country underwent a change. Of late years, though the coffee is as productive and good as ever, the great fall in price, due to the competition of Brazil, has caused deep depression. Many Europeans and natives have been impoverished, and numerous coffee estates abandoned. The year 1897–8 was very unhealthy on account of fever, and several prominent Coorg officials died. Though famine is unknown in Coorg, a short rainfall, and exhaustion of the usual reserve stock of grain, caused distress in parts of the south in the closing months of 1900. The Madras regiment stationed at Mercāra was withdrawn in 1883; and a regiment of Coorgs was enrolled in 1902 as an experiment, but was not satisfactory and has been disbanded.

Cairns containing kistvaens exist in various parts. Some have been opened at Arameri in Beppunād, near Vīrarājendrapet, and near Fraserpet. They contain the pottery usual in them elsewhere; and some red carnelian beads, with straight or zigzag parallel lines scratched on them, filled in with white, as well as iron implements, with spear and arrow-heads, all very much corroded, have also been found. The structures are called Pāndu-pare, 'dwellings of the Pāndus,' by the Coorgs. No existing people claim to have any connexion with them.

The Coorgs have near their houses a small square building or shrine called Kaimada, in which they keep silver plates with images of men and women in Coorg costume chased on them. These represent ancestors, whose departed spirits are annually worshipped. Other ancient Coorg remains are the *kadangas* or war-trenches, which stretch over hills, woods, and dales for miles, in some places branching off in various directions or encircling hill-tops. No doubt they also formed boundaries between the *nāds*. Some are nearly 40 feet from summit to bottom of ditch, and are often taken along hill-sides with an angle of 80° to the horizon. An inscription of A.D. 887 mentions the Penne *kadanga*, and one of A.D. 977 the 'new trench.' They were therefore in existence in the Ganga period. It has been noticed that they resemble earthworks of the ancient Britons, who sank one or more deep trenches round the summit of a hill, and raised lofty banks with the excavated soil. This is the most ancient species of rampart known, and existed ages before the use of mural fortifications.

The inscriptions of Coorg have been translated and published in the Mysore Archaeological series named *Epigraphia Carnatica*. Though not numerous, they are of interest and importance, especially the early ones. They relate to the Gangas, Hoysalas, Changālvas, Kongālvas, and Coorg Rājās.

Of architectural monuments the tombs of the Rājās near Mercāra are the principal, built in 1809 and 1821. They are square buildings, much in the Muhammadan style, on well-raised bases, with a handsome dome in the centre, and minaret-like turrets at the four corners, surmounted by *basavas* or bulls. On the top of the dome is a gilded ball, with a vane, and all the window frames are of handsomely sculptured syenite, with solid brass bars. The palace at Mercāra, of about the same period, is also of interest, though alterations have been made to fit it for its present uses.

The following table gives statistics of the population of Coorg as returned at the Census of 1901:— **Population.**

Tāluk.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Mercāra . .	216	1	56	28,620	132	−16.0	Details not available.
Nanjarājpatna .	355	3	280	42,720	120	− 1.5	
Pādinālknād .	400	...	57	28,620	72	+ 1.4	
Yedenālknād .	201	1	52	43,412	215	+ 20.1	
Kiggatnād .	410	...	68	37,235	91	+ 12.8	
Total	1,582	5	513	180,607	114	+ 4.4	14,067

The density of the population is 114 persons per square mile; but if the area of forests be excluded it rises to 184, the corresponding figure for Mysore being 185.

The urban population is 8.4 per cent. of the whole. Five places are classed as towns, of which only two—MERCĀRA (population, 6,732) and VĪRARĀJENDRAPET (4,283)—are entitled to be so called. The other three—SOMVĀRPET (1,745), Fraserpet (1,600), and Kodlipet (889)—are scarcely more than villages, but are reckoned towns as being municipalities. The urban population has declined in each decade since 1881, by 6.8 per cent. in 1891, and 1.7 per cent. in 1901. The general cause is the falling off in the coffee-growing industry; but in the case of Mercāra the decrease between 1881 and 1891 was partly due to the withdrawal of the regiment that used to be stationed there. The only towns that show a small increase are Somvārpet and Kodlipet. There are 513 inhabited villages. But except in the Nanjarājpatna *tāluk*, villages in Coorg are merely areas convenient for administrative

purposes. The people mostly live in separate homesteads wide apart, as in the Malnād of Mysore. The average population of a village is only 345. The towns have markets and are centres of trade, but the villages are entirely rural. The number of occupied houses per square mile has risen from 14 in 1881 to 17 in 1891 and 19 in 1901. Correspondingly the occupants per house have fallen from 7·98 in 1881 to 6·45 in 1891 and 5·91 in 1901. The average number of occupants per house is higher in the villages than in the towns, being 6·02 in the former to 4·96 in the latter. This is due to the Coorg custom of all the several branches of a family living under the same roof. But the tendency is increasing for the families to subdivide and live separately.

The total population at each Census has been as follows: (1871) 168,312, (1881) 178,302, (1891) 173,055, and (1901) 180,607. The increase in the earliest decade shows that Coorg was not affected by the famine of 1876–8. The variations in the other periods are chiefly due to a cause special to Coorg. In 1881 the coffee crop was late, and the estate coolies who were picking it therefore remained longer than usual and were included in the Census. In 1891 they had mostly returned to their own countries before the Census was taken. In 1901, again, the crop was a heavy one, and the coolies in consequence were then also mostly on the estates at the time of the Census. There are no separate statistics of immigration or emigration, so that these disturbing factors cannot be accurately eliminated. But from the tables of birthplace it has been estimated that the settled population increased by 4·5 per cent. in the decade ending 1901, and the immigrants by 4·1 per cent. If this be the case, the general result is not greatly affected. The Coorgs proper increased by 10·7 per cent. between 1891 and 1901, compared with 20·6 per cent. between 1881 and 1891. They therefore multiplied faster than the general population, but not so fast as before. This is an index to the check on the prosperity of the country due to the decline in the coffee industry.

At the Census of 1901 there were 55,098 persons in the Province who had been born out of it, and 3,184 who had been born in it were registered elsewhere in India. Of the latter, 2,553 were in the neighbouring State of Mysore.

The percentage distribution of the total population of each sex under different age-periods is as follows: Age 0–5, males 9·5, females 12·3; 5–15, males 32·6, females 39·1; 15–40, males 50·6, females 44·7; 40–60, males 14·4, females 12·9; 60 and over, males 2·4, females 3·3. The following anomalies present themselves. There are more males of the age 25–30 than in any other quinquennial period, and this has been the case in each previous Census. It is due to the fact that a large proportion are male immigrant coolies in the prime

of life. Females, on the other hand, have been most numerous up to age 9. Fewer females therefore are immigrant labourers.

The following table of vital statistics is based on the published figures, but the results are likely to be misleading. It must be borne in mind that Coorg is visited at certain seasons of the year by thousands of coolies, who remain only a few months. They are specially liable to sickness, and the men are not generally accompanied by their wives, these facts accounting for both the high death-rate and the low birth-rate.

	Population under registration.	Ratio of registered births per 1,000.	Ratio of registered deaths per 1,000.	Deaths per 1,000 from			
				Cholera.	Small-pox.	Fever.	Bowel complaints.
1881	178,302	15·86	17·90	...	...	15·66	...
1891	173,055	20·31	21·84	...	0·44	...	...
1901	180,607	18·83	36·49	0·32	2·49	28·69	1·21
1904	180,607	21·98	26·62	...	0·09	22·45	0·49

There were 42,641 patients treated in the Government hospitals and dispensaries in 1904, of whom 58 per cent. were men, and the remainder women and children in about equal proportions. Of the diseases under treatment malarial fevers accounted for 18 per cent., and skin diseases for 15 per cent. Other common diseases were worms, rheumatic affections, and anaemia. Of local diseases the greater number of cases were complaints connected with the digestive system, lung diseases, and diseases of the spleen.

Plague invaded the Province in 1903, breaking out at Vīrarājendra pet in May, at Gonikoppal in September, and at Sirangala in December. Altogether there were 105 seizures and 45 deaths. The disease then disappeared in the former parts, but broke out again in 1904 at Fraserpet, where there were altogether 35 seizures and 19 deaths.

The following table shows the number of children of either sex to 1,000 of the same sex at each of the last three census periods. The last decade was more fatal up to age 5 than the previous one, but was better than the decade ending 1881 :—

Age.	1881.		1891.		1901.	
	Male.	Female.	Male.	Female.	Male.	Female.
0-5 .	84	113	111	146	95	123
5-10 .	111	142	115	139	112	139

The number of females to males in 1901 was as 801 to 1,000. This is the effect of the presence in the country of a number of male immigrant labourers. In 1891 the proportion was 804 (probably so

high because, as has been stated above, the immigrant coolies had left before the Census), in 1881 it was 775, and in 1871 it was 782. The increase since 1881 may be due either to more women coming into Coorg with the coolies than before, or to the enumeration of the sexes being more correct. Except among Christians, the proportion of women is lowest in all religions between the ages of 25 and 50, showing that few of the immigrant labourers are Christians. Females are also fewer in proportion to males among Musalmāns than under any other religion, the reason probably being that the Muhammadans are largely traders, who have not brought their wives with them. Taking the two classes which are especially the permanent inhabitants of Coorg, and of no other country, it is found that among the Kodagas or Coorgs proper there are 979 females to 1,000 males, and among the Yeravas 942. The only caste or sect of any strength in which the females preponderate over the males is that of the Lingāyats, among whom there are 1,038 females to 1,000 males.

Taking the statistics as they stand, Coorg exhibits the same characteristics as other Indian Provinces: namely, almost universal marriage, marriage at early years (especially among girls), and a high proportion of widows to widowers. But in Coorg 34 per cent. of the males and 11 per cent. of the females over 15 years of age are unmarried, less than 1 per cent. of the boys and 2 per cent. of the girls under 15 are married, and there are only 285 widows to every 100 widowers. This last result must be due to the large number of male immigrants who are not accompanied by their women dependents. Men of over 30, and women of over 20, are with few exceptions married. Girls are generally married between the ages of 15 and 20, and youths before they are 25. The Kodagas or Coorgs proper do not marry so universally or so young as other Hindus, and widow marriage is allowed to a considerable extent. For 37 per cent. of their males and 19 per cent. of their females over 15 years of age are unmarried, while only 314 in 1,000 males and 325 in 1,000 females are married, against 396 and 378 in the whole population. In the total population there are only 764 wives to 1,000 husbands, and among the Musalmāns only 593.

The language most in use, and the official language, is Kannada, the Karnāta or Karnātaka of the *pandits*, and the Canarese of European writers. It is spoken by 42 per cent. of the population. Next to this comes Kodagu or the Coorg language. This is spoken by 22 per cent. and by others than Coorgs, for 39,148 persons have returned it as their parent tongue, although the number of Coorgs by race is only 36,091. One of the castes using it is the Ayiri caste of artisans. The increase in the number of people who speak the language is 10 per cent. for the decade, or nearly the same as the rate of increase in the Coorg race. The Kodagu or Coorg language is a dialect of Hala Kannada or Old

Kanarese, midway between that and Malayālam. It has no written character or literature, but is written in Kannada or Kanarese letters, and has a number of ballads or chants (*pāttu*). A Coorg Grammar was published for the first time in 1867, by Major Cole, then Superintendent of Coorg; and some specimens of Coorg songs, with an epitome of the Grammar, were published by the Rev. A. Graeter at Mangalore in 1870. The other distinctive language of Coorg is Yerava, a dialect of Malayālam, spoken by 7 per cent. of the population, who are chiefly members of the hereditary servile class of that name. Tulu, the language of South Kanara, is spoken by 7·2 per cent. Other languages include Hindustāni, Tamil, Telugu, Marāthī, and Konkanī. Among jungle tribes, Kurumba, a dialect of Kanarese, is spoken by 2·3 per cent.

The two distinctive classes special to Coorg are the Kodagas or Coorgs proper, from time immemorial the lords of the soil, and the Yeravas or Eravas, their hereditary praedial slaves, now of course free. The Kodagas number 36,091, or 20·5 per cent. of the population, and the Yeravas 14,586, or 8 per cent. more; but associated with these two are certain other Coorg classes which bring up the whole number to 53,945, or altogether 29·3 per cent. The Kodagas form a distinct highland clan, free from the trammels of caste, and as a rule resent Brāhman intervention. Their physical characteristics and manly bearing, combined with a picturesque dress, have always attracted the attention of Europeans; and scientific investigation has now shown that ethnographically they are a superior race[1]. Totally distinct in general appearance and in bodily measurements are the Yeravas, many of whom still live in a very wild state in the jungle, while others have enlisted as coolies on coffee plantations. The Coorg is taller than the Yerava, has a finer nose, a larger head with a distinct tendency towards brachycephalism, and a more perfect approach to orthognathism. Apart from anthropometrical results which can be expressed in figures, we have the contrast of colour between the fair (light-brown) Coorg and the very dark-skinned Yerava. The hair of the former is straight, while that of the Yerava is distinctly wavy, and the broad nose of the latter is accompanied by thick, slightly averted lips. The Coorgs and Yeravas thus belong to two distinct ethnic types. The latter tribe falls into a group with the Kurumbas, Irulas, Paniyans, and Kadirs, who are the South Indian cousins of the Kols and Gonds. These somatic characters of the Coorgs mark them off with unmistakable distinctness from the other races who speak Dravidian languages, but leave the question of their ethnic relationship an unsolved problem. According to one theory they are the southernmost extension of a Scytho-Dravidian type which prevails throughout the West of India. As the Coorgs are said to be Ugras,

[1] T. H. Holland, *Journal of the Asiatic Society of Bengal* for 1901, part iii, p. 59 ff.

one is tempted to see a possible connexion with the founder of the Sāntara kingdom at Pomburchha or Humcha in the Shimoga District of Mysore, who claimed to be of the Ugra stock, and to have come from the Northern Muttra. The *Mangarāja Nighantu* of 1398 describes the Kodavas and Kodagas as Mlechchas, which implies that they were foreign and anti-Brāhman.

The full dress of a Coorg consists of a long coat (*kupasa*) of dark-coloured cloth, open in front and reaching below the knees. The sleeves end below the elbow, showing the arms of a white shirt, now generally of the English pattern. The coat is folded across, and confined at the waist by a red or blue girdle, wound several times round, and knotted on the left front. On the right front the Coorg short knife (*picha katti*) is stuck into the girdle, having an ivory or silver handle or hilt and fastened with silver chains. The large broad-bladed waist-knife (*odi katti*) is now more rarely worn. Its place is at the back, where it is carried in a brass clasp, parallel with the waist, with its point directed towards the left shoulder. Like the *kukri* of the Gurkhas, which it resembles, it was a formidable weapon in hand-to-hand fighting. It is now used only as a test of skill and strength on festive occasions, as when a bridegroom is expected to cut through the trunk of a thick plantain-tree at one stroke. The head-dress is a red kerchief, or the peculiarly fashioned turban, large and flat at the top and covering a portion of the back of the neck. The dress of the Coorg women consists of a white or light-blue cotton jacket, with long sleeves, fitting tight and closed up to the neck. The skirt is white muslin or blue cotton stuff, wrapped several times round and tied at the waist by means of a string. One end is brought over the bosom and knotted on the right shoulder. The other end, gathered into folds, is worn, contrary to the usual fashion of Hindu women, at the back. The head is covered with a white muslin or coloured kerchief, one end of which encircles the forehead, and the two corners are joined together at the back, allowing the ends to fall over the shoulders.

The houses are generally situated close to rice-fields, on a sheltering slope of *bāne* land, surrounded by clumps of plantains, sago and areca-nut palms, and other fruit-bearing trees. A coffee garden and a small vegetable plot are seldom absent; and where the locality is favourable, a little tank well stocked with fish is not uncommon. The position, style of building, and approaches of old Coorg houses strongly remind one of small fortifications. A deeply cut passage, paved with rough stones and overgrown with shady trees, its sloping side walls decked with a variety of luxuriant ferns, leads in angular lines to the doorway, passing under an outhouse. Through a paved courtyard, enclosed on three sides by stables, storerooms, and servants' quarters, one passes to the front of the main building, which is square, of one storey, and

raised about three feet above the ground. All the buildings are roofed with bamboos, and thatched with rice-straw. The front is an open veranda—the reception hall. Screened off from this is a quadrangle around which are the dwelling rooms. The front door-posts and pillars are often well carved. A deep stone-lined well is usually on the premises, or water is obtained from a hole sunk by the side of the rice-fields. Near the well is a hut for hot bathing. The low-caste servants have their huts at some distance away. The Coorg house is the domicile of all the male relatives, with their wives and children, belonging to one parental stock, and there may be 40, 60, or 80 and more inmates. The men plough the fields, transplant and reap the rice; the women carry manure, weed, fetch home and clean the paddy. The men do no menial work, which is left to the women and servants, while they enjoy a dignified repose, chewing betel and discussing affairs. Others, gun on shoulder, wander through the jungles in search of game. But the height of ambition with many is to figure as Government officials.

The religion of the Coorgs consists of ancestor and demon-worship; but domiciled Brāhmans have introduced Mahādeva and Subrahmanya under the name of Iggutappa, and have Brāhmanized the worship of the river Cauvery. The Nātas, or spots on which cobras have finished their course of terrestrial life, are the object of solemn ceremonies. Some of the *bānes* (parcels of grazing-ground or forest) have a presiding divinity to which an annual sacrifice of pork and cakes is offered. For Ayyappa-deva are set apart extensive forests called Devara-kādu, which are untrodden by human foot, and reserved for the abodes or hunting-grounds of deified ancestors.

A council of elders, called Takkas, are the moral censors and regulators of social affairs. The institution is hereditary in certain families. The authority of the village Takkas extends over offences against social customs, attendance at and proper conduct during public feasts, drunkenness, and adultery. The offender has to appear before the council of the elders of the village, at the *ambala* (a place of assembly on the village green), where the case is examined into. The presiding Takka pronounces the sentence, which may amount to a fine of Rs. 10. Should the offender refuse to pay, he will be excommunicated, when he may appeal to the assembly of the Takkas of all the villages in the *nād*, and their decision is final. The contact of the Coorgs with Europeans, who chiefly settled in the country as coffee-planters, has not proved an unmitigated boon. With the influx of more money, intemperance, which was rigorously repressed in the times of the Rājās, got a fearful hold on the people, who, no longer satisfied with their own products, indulged in the strongest European liquors. A temperance movement started in 1883 by leading Coorgs and enforced by fines among themselves did not enjoy a long existence, but the pressure of hard times has

tended to check indulgence in expensive liquors. Another institution of the Coorgs is the Aruva ('one who knows'). A particular friend of a neighbouring Coorg house becomes the Aruva of a family, and a member of this family is naturally the Aruva of the other. Aruvas act as representatives, counsellors, and guardians of families and individuals on the great occasions of life. All the preliminaries to a marriage are conducted through them. It is a sound rule that young people are not married under sixteen years of age. Negotiations for a marriage are conducted by the nearest relatives in the first instance; and when the assent of both the parties is obtained, the formal proposal is made by the parents, usually the mother of the young man to the mother of the intended bride. On the acceptance of the proposal, the nearest male relative accompanied by the Aruva proceeds to the bride's house, and fixes the marriage day in consultation with an astrologer. The Aruva and the other members of the bride's family will be present on the occasion, and the proposal is ratified in front of a lighted lamp in the hall. The ratification is evidenced by the bridegroom's party pledging an ornament with the bride's people. The peculiarity of a Coorg marriage consists in the fact that ceremonies are performed simultaneously in the respective houses of the bride and the bridegroom, unlike the marriages among other Hindus. On the eve of the marriage day the villagers are invited, and the necessary arrangements for the next day's ceremonies are made. On the morning of the marriage day, at their respective houses, the bride and the bridegroom are bathed and dressed. They are then conducted to the hall, where they are seated on tripod stools with lighted lamps on either side, placed in plates containing rice. The assembled relatives and guests then give them presents. Before doing so they strew rice on their heads and give them a sip of milk from a spouted vessel placed on one of the plates. This over, the guests are fed sumptuously; and in the evening the bridegroom, accompanied by relatives and friends, starts for the bride's house, where they are received ceremoniously and fed. At the *muhurtam* hour, the bride and the bridegroom are seated side by side and presents are given again. The bridegroom gives his present last. The bride is then conducted to the kitchen. In the hall the Aruvas declare the marriage to be complete, and the bridegroom's Aruva delivers three pebbles to the bride to be tied to the hem of her garment in token of the permanency of the marriage contract. The bride is then led out by the bridegroom, and the party leaves the bride's house.

The Coorgs have been charged with polyandry; but if ever this was their custom, it is not so now. Polygamy is so far allowed that a second wife may be married if the first is not blessed with male issue. A young widow is sometimes taken to wife by another member of the same house, but this is a voluntary engagement on either part, and

the woman loses all claim to her late husband's property. Divorce on account of unfaithfulness in the wife is a recognized institution, and is solemnly carried out by the Aruvas of the unhappy couple and by the Takkas of the village. The children remain in the father's house, the mother returns with all her belongings to the house of her parents. At child-birth, as soon as a Coorg boy is born, a little bow, made of a stick of the castor-oil plant, with an arrow, made of a leaf-stalk of the same plant, is put into his little hands, and a gun fired at the same time in the yard. He is thus introduced into the world as a future huntsman and warrior. At death, the bodies of young persons under sixteen and women are buried; those of others, especially old people, are burnt.

The festivals of the Coorgs are the Kāveri, the Huttari or harvest feast, the Bhagavati, and the Keilmuhurta or festival of arms. The Kāveri feast is at the time of the sun's entry into the sign of Libra, in October. It consists of a general pilgrimage to Tale-Kāveri, and bathing at a given signal in the tank at the source of the Cauvery river. Those who do not go there celebrate it in certain ways at home. The Huttari is a month or so later, when the sun enters Scorpio. It is the harvest festival or feast of first-fruits. The name is said to be derived from the Malayālam *pudi-ari*, 'new rice.' The first six days are taken up with feastings, pork and spirits being largely consumed, and with games and dances from sunset till after ten o'clock every night on one of the *mandus*[1], where the whole male population, except little boys and men of over sixty, have religiously to attend. The seventh is the great day of the festival. After various preparatory ceremonies, the person chosen by the astrologer to cut the first sheaf goes at sunset to the fields in procession, with a lighted lamp in a dish of rice carried before him. He has a sickle in one hand, and a bamboo bottle of fresh milk in the other. In the appointed manner he cuts the sheaf, distributing stalks to those present, and putting some in the milk. The procession returns to the house, where stalks of rice are bound to all the different parts. The sheaf-cutter then kneads the Huttari dough out of various grains and seeds, of which every one eats a little. A supper follows, in which some of the new rice is used. Certain dances are kept up for four days more. The Bhagavati feast is held in the two months before the monsoon. It consists in carrying the image of the goddess in procession, holding Tantric dances, and levying contributions generally under dread of being visited with blindness or other infirmity. The Keilmuhurta is a festival of arms held in August or September, when the labours connected with rice-planting are over and

[1] The *mandu* is an open public place or green. Villages generally have three—the Panchāyati-mandu for business; the Devara-mandu, where dances are performed in the name of the goddess Bhagavati; and the Uru-mandu or village green, where the Huttari performances take place.

there is a break in the monsoon. The arms are all collected in the principal room and worshipped. Then follow athletic exercises on the Uru-mandu or village green, where the men display their skill and dexterity with the various weapons. Next day takes place a general hunt in the forest of the village, followed a day later by a great hunt in which the whole *nād* join.

Of tribes special to the country, the Yeravas (14,586) are, next to the Coorgs, the most numerous. Their ethnical characteristics have been described above. They live almost entirely in the Kiggatnād and Yedenālknād *tāluks*, and are said to have come originally from the Wynaad. They speak a language of their own, a dialect of Malayālam. They are much sought after as labourers, and are slaves in all but the name. At their weddings and Pandalāta or demon feasts they chant their peculiar songs, and have dances in which their women take part. There are two sections—Panjiris and Paniyas. The former allow their fleecy hair to grow to dense masses which are never disturbed by a comb, but seldom have more than a few straggling hairs to represent a beard. Their appearance resembles that of the Australian aborigines. The Paniyas appear more civilized. Each section has a headman who seems also to act as its priest. The Paniya headman is called the Mūppa, and the Panjiri headman the Kanaladi. Their favourite deity is Karingāli, which means 'black Kāli.' They eat pigs, rats, and vermin, but not beef. The Heggades (1,503) are cultivators from Malabar. They conform to Coorg customs and speak the Coorg language, but are not admitted to community with the Coorgs, in whose presence they are allowed to sit only on the floor, while the former occupy chairs or higher seats. The Ayiri (898) are the artisan caste. They are said to have come from Malabar in the seventeenth century, but now speak the Coorg language and follow many of the Coorg customs. According to occupation there are Tattās (goldsmiths), Kollas (blacksmiths), and Tacchāyiris (carpenters), all of whom intermarry. But none will intermarry with a section called Kambala Ayiris, who are regarded as outcastes. The Ayiris do not employ Brahmāns but perform their own ceremonies, and do not wear the sacred thread. They eat mutton, game, and pork, but not beef, and drink spirits. The Medas (584) are basket- and matmakers, and act as drummers at the feasts. They dress like Coorgs though in poorer style, but are of Mysore origin, and speak the Coorg language and a little Kanarese. The Maleya (129) are gipsies from Malabar, who profess to cure diseases. The Binepatta (98) were originally musical mendicants from Malabar, but have taken to agriculture and speak the Coorg language. The Kavadi (49) are cultivators in Yedenālknād, who have adopted the Coorg language and dress. They are said to have come originally from Malabar.

Of tribes not special to Coorg the most numerous are the Holeyas (27,000), who do all the menial work for the Coorgs, and were formerly their slaves. There are four sections—Badagas from Mysore, Kembattis and Māringis from Malabar, and Kukkas from Tuluva. Next to them in number are the Lingāyats (8,700). This is properly a religious sect, and is described, as well as the Holeyas, in the article on MYSORE STATE. The most important Tulu class are the Gaudas (11,900). They are found principally along the western boundary. They speak Tulu and the men wear the Coorg dress. As their name indicates, they are farmers. The Tīyas (1,500) and Nāyars (1,400) are Malayālam immigrants, and have hardly any women with them. The chief Tamil class is the Vellāla (1,300). Of Marāthās there are 2,400, and of Brāhmans only 1,100. The most numerous Musalmāns are Māppillas or Moplahs (6,700), and next to them Shaikhs (4,400). Both are chiefly traders. There are 3,160 native Christians, 295 Eurasians, and 228 Europeans. The Christians have increased by 8·5 per cent. since 1891. The following are the principal denominations :—

	Europeans.	Eurasians.	Natives.	Total.
Roman Catholic . .	13	175	2,771	2,959
Anglican . . .	163	90	6	259
Lutheran . . .	17	18	346	381

As the figures stand, the Roman Catholics increased by 14 per cent. since 1891. The Anglicans show a decrease from 458 to 259, and the Lutherans an increase from 29 to 381. But 152 who returned themselves merely as Protestants in 1891 may have been Lutherans, and there were 148 more in that year than in 1901 who did not return their sect. Hence these figures afford no basis for useful comparison. The Church of England is under the Bishop of Madras, and has churches at Mercāra and Pollibetta. There is no permanent chaplain, but they are visited periodically by the chaplain at Mysore.

The first Christian settlement was the Roman Catholic in 1792, which arose out of the persecutions of Tipū Sultān. On his capture of Bednūr and siege of Mangalore in 1783, he deported to Seringapatam large numbers of Konkani Christians from the west coast for having given assistance to the British. In 1792, during the siege of Seringapatam by Lord Cornwallis, they made their escape, and were eagerly welcomed by Dodda Vīra Rājendra, the Coorg Rājā, into his depopulated country. He gave them land at Vīrarājendrapet, obtained a priest for them from Goa, and assisted them in building a chapel, which he endowed with an allowance of rice, oil, and candles. This was commuted by the British Government in 1835 into a monthly grant of Rs. 20. The community is under the Roman Catholic Bishop of Mysore at Bangalore, the claim of the Archbishop of Goa to control them having been

rejected in 1846, and the see of Mangalore having declined to send priests. The church was rebuilt with Government aid in 1835, and on a larger scale in 1866, with a priest's house, and schools for boys and girls. The Christian quarter of the town has a clean and tidy appearance. But no Coorg and hardly any other high-caste people of Coorg have ever joined it. There are also Roman Catholic churches at Mercāra, Vīrarājendrapet, Ammatti, Siddapur, Fraserpet, and Suntikoppa, with special schools at Vīrarājendrapet and Kedamullur.

The only Protestant mission to the Coorgs is the Basel Lutheran Evangelical. On the annexation of the country by the British in 1834, Colonel Fraser considered it a specially favourable field for a mission, owing to the absence of caste among the people, and offered his share of prize-money for the purpose of founding one. But neither the Wesleyan nor the London Missionary Society could spare men for a new place so far from their existing stations. The colonel, however, established a school at Fraserpet and endowed it. The Basel Mission had in this year commenced work on the west coast, and occasional visits were paid to Mercāra and Vīrarājendrapet. But it was not till 1852 that mission work was permanently entered on in Coorg, under somewhat romantic circumstances. Dr. Moegling of the Basel Mission at Mangalore was about to return to Germany for his health when he was visited by a Coorg man, disguised as a *sannyāsi*, who applied for Christian instruction. He was baptized in 1853, and returned to his house in Coorg, accompanied by Dr. Moegling, being gladly received by his wife, who declared her intention never to leave him. But his neighbours and relatives drove him from his house, and he was beset by creditors. He took refuge with the missionary at Vīrarājendrapet, and on the case being referred to head-quarters, Sir Mark Cubbon, the Chief Commissioner, directed that his house should be restored to him. A church was now built on ground given by the convert, and preaching at the various market-places was commenced. Dr. Moegling, having started the mission on his own responsibility, had to find support for it, which he did for six years, compiling for this purpose his *Coorg Memoirs*, an interesting account of the country and its people. Two more Coorg families had meanwhile joined him, and 130 Holeyas, for whom a settlement named Anandapur was formed on a waste farm taken from Government at Ammatti-nād, presided over by the Rev. Mr. Kaundinya, a Brāhman convert made by Dr. Moegling at Mangalore. The Doctor went to England in 1858 to seek union with the Church Missionary Society, but they could only give him a grant (of £500), and advised him to continue with the Basel Mission. Encouraged by this help he returned to Coorg, but had to leave India for good in 1860. The colony has since been maintained by the Basel Mission, but its situation in the Bamboo district has proved very

unhealthy. The original convert seceded and disappeared, and little further progress seems to have been made in connexion with the Coorgs. Chapels and schools exist at Mercāra and Ammatti.

No less than 82 per cent. of the inhabitants subsist by agriculture in some form or other. As many as 46 per cent. are landholders and tenants, 19 per cent. are agricultural labourers, and 16·5 per cent. are engaged in the cultivation of coffee, as owners or managers of estates, or labourers employed on them. Of the Coorgs themselves, 98 per cent. are engaged in agriculture, and 1 per cent. in the administration.

Agriculture.

The weathering of the metamorphic rocks which compose the mountains of Coorg, chiefly granite, syenite, and mica schist, has produced a deep surface soil of great fertility, which is annually renewed by the decomposition of the virgin forest. The soil in the north-east resembles that of the neighbouring parts of Mysore.

Rice is the staple product of Coorg, and the yield from ancient times has furnished an unfailing supply for home consumption and for export to the Malabar coast. Wherever practicable the valleys have been formed into flats and terraces for rice cultivation, the finest stretches of which are to be found at Kadanur and Bittangala near Vīrarājendrapet, and in the Lakshmantīrtha valley near Hudikeri and Devanūr. The copious rainfall and the multitude of small rivulets rising in the wooded ravines render the cultivation in great measure independent of artificial irrigation. Rice is practically the only cereal crop in Coorg proper. The kind most commonly cultivated and in general use is the large-grained *dodda batta*, which is also exported. A finer and more palatable variety is the small-grained *sanna batta*, and yet another species is the red grain known as *kesari batta*. For parched rice *kalame* is the kind used. The system of cultivation is that of transplantation. Small heaps of cattle manure and dry leaves having been burnt on the spot and their ashes scattered over the ground, ploughing begins with the first showers in April and May, being solemnly entered on with appropriate ceremonies. The ground having been ploughed over several times and levelled, 'till the soil is soft as treacle, and the foaming surface white as milk,' the transplanting takes place during July and August. This is done only by the men; and on its completion they have races through the heavy slush, a space about 10 feet wide having been left in the whole length of the fields for the purpose, and prizes are awarded to the first four or five. The rice harvest is gathered in November and December, being celebrated with the Huttari festival already described.

To a considerable number of Coorgs the cultivation of cardamoms was formerly second in importance only to that of rice, and the possession of a fine cardamom jungle was regarded as a mine of wealth.

In the time of the Coorg Rājās, and for some time after, cardamoms were a State monopoly and were purchased at a fixed rate from the cultivators. The jungles are now leased by the Government. But during the last twenty years the price of this product has fallen to such an extent that it now scarcely pays to collect the berries, and many well-to-do families who depended chiefly upon their cardamom *males* for the purchase of articles required to supplement the produce of their rice-fields have been greatly impoverished. The cardamom plant grows spontaneously in the evergreen forests or *males* along the Ghāt line and its spurs, at an elevation of from 3,000 to 5,000 feet. Still, nature requires a certain stimulus to produce the plant in greater abundance, which is effected by felling a big tree on a cleared space in the forest. February or March is the season for this, and the shaking of the ground causes the young plants to shoot up within three months. The capsules appear in the third year, and ripen in September or October, when the crop is gathered. But it is not till the fourth year that a full harvest is obtained ; and the plants may yield a good crop for seven years, when the felling of another big tree on the top of them is needed to reinvigorate them. In order to protect the forests, the areas to be cleared for cardamoms are strictly limited to plots of not more than one-sixth of an acre.

A brief account has been already given of the introduction of coffee cultivation, which during the past forty years has held such a prominent place in Coorg, and effected such great changes in the country. But the deep depression which has in the past decade overtaken this once flourishing industry has led to the abandonment of many estates, and renewed interest in their old rice cultivation is reviving among the Coorgs. Other products which have been tried by Europeans are cinchona and tea, but in neither case has there been any decided success. A syndicate in London which took up an area of 2,000 acres for tea has relinquished it.

The coffee estates may be classified into three groups: those of the Mercāra plateau, those of the Ghāt ranges, and those of the Bamboo district. The Mercāra plateau, with an elevation of 3,500 to 4,000 feet, enjoys a bracing climate, being exposed equally to the sweeping monsoon rains and to the drying east winds. An average rainfall of 123 inches, distributed over almost the whole year, provides ample moisture. The granitic soil consists generally of a red felspathic clay, more or less mixed with gritty ferruginous stones, and covered with a layer of humus. The land being steep, provision must be made, by terracing, draining, and a judicious system of weeding, against the wash of the surface soil. Artificial shade is not required, for the sheltered hill-sides and gently sloping valleys are here covered with the most luxuriant and productive trees. The Ghāt estates extend along both

sides of the Sampaji valley, along the Periambadi *ghāt*, and over the eastern and western declivities of the Western Ghāts. Originally covered with primaeval evergreen forest, these tracts possessed a splendid soil, whose fertility was heightened by a heavier fall of rain than on the Mercāra plateau, and also by a variable condition of atmospheric humidity. But the extensive felling of forest, followed by burning, which destroyed a great deal of the valuable surface soil, converting the humus into ashes which were blown or washed away, and a faulty system of weeding in order to show a clean surface, all added to the impoverishment of the soil. The exposed trees, thus left without nourishment during successive seasons of drought, fell an easy prey to the borer, and also suffered severely from bug, leaf rot, and leaf disease. The abandoned estates have been overrun by the *Lantana*, a shrub introduced in 1863, which has covered the hill-sides with an almost impenetrable bush. The Bamboo district lies in the zone of deciduous forest extending all along the eastern ranges. The elevation is from 3,000 to 3,500 feet, and the annual rainfall between 45 and 75 inches, steadily decreasing to the eastward. The land generally presents undulating slopes and but few steep hills. The soil is of the richest kind, as the humus from an exuberant vegetation, which annually decays or is consumed by jungle fires, has accumulated for ages without being disturbed by heavy floods. The rainfall is gentle and reasonable, and the growth of coffee most luxuriant and productive. If anywhere in Coorg, this is the typical habitat of the coffee-tree; but it was here that the borer committed its most destructive ravages, the means of counteracting which are now happily better known. On these estates artificial shade is deemed necessary.

'Dry crops,' of which *rāgi* is the chief, are cultivated only in the Nanjarājpatna *tāluk*, along the west bank of the Cauvery, and are similar to those in the adjacent parts of Mysore.

Of fruit trees, the plantain is common all over Coorg, and its stems are in requisition for some of the national sports and festivals. The Coorg oranges are also famous, and as common as the plantain. The best variety is the sweet and luscious 'loose jacket,' so called because the rind of the ripe fruit is almost detached from the pulp.

Up to 1904 there had been advanced for agricultural loans a sum of Rs. 49,000, and for land improvement Rs. 40,000.

As regards the indebtedness of the Coorgs, the Chief Commissioner, writing in 1899, said:—

'Their country has been pauperized by the introduction of such a ready means of becoming rich as presented itself some years ago in the cultivation of coffee, with the higher style of living which unfortunately resulted, and especially the facility for extensive borrowing which it afforded. It is now extremely difficult to obtain advances on coffee

estates, and the Coorgs have nothing else to offer as security; if they mortgage their *sāgu* rice lands (*jama* lands being inalienable) they cannot live. . . . The matter seems to be as yet hardly ripe for Government intervention, nor is the situation so desperate as to call for extraordinary measures. There are, I believe, some signs that the Coorg character is slowly undergoing change, in recognition of the necessity for thrifty living and the abandonment of the foolish pride which has operated to prevent the people taking service, while it tolerated dissipation and laziness.'

The climate is unfavourable to most domestic cattle. The only animals that thrive well are the buffalo and the pig, the latter the favourite animal for food, especially at festivals. Donkeys and goats also do well, but not sheep, except in the east. The Coorgs procure their cattle partly from Mysore, partly from the annual fair at Subrahmanya in South Kanara; and a strong breed is needed for ploughing the heavy rice-fields.

The only canal irrigation project in Coorg is in connexion with the Chikkahole river, from which a channel has been taken off on the right bank. But, owing partly to the porous nature of the soil through which it is cut, and partly to the damage done by wild elephants, it has been found impossible hitherto to ensure a regular supply of water sufficient to irrigate the fields under it. A dam is under construction at Devanūr, and a project at Segai Hosūr is being considered. The Niluvāgal and Dodda-Kanagalu tanks in the Nanjarājpatna *tāluk* have been successfully restored.

STATISTICS OF AGRICULTURE IN COORG
(for the Year ending June 30)

	Average, 1882-90.	Average, 1891-1900.	1900-1.	1903-4.
	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.
Total area	1,582	1,582	1,582	1,582
Total uncultivated area	1,289	1,321	1,279	1,355
Cultivable, but not cultivated	111	122	145	242
Uncultivable	1,006	1,199	1,134	1,113
Total cultivated area	211	261	303	227
Irrigated area (from canals)	0.81	1.3	2.1	2.1
Total cropped area.				
Rice	115	130	147	126
Rāgi	...	13	28	9
Other food-grains and pulses	2.4	0.4	0.4	5.6
Oilseeds	...	0.07	0.07	0.2
Condiments and spices	0.5*	1.6	1.5	1.9
Coffee	92	112	107	82
Tobacco	...	0.02	0.03	0.1
Cinchona	2.4†	0.08	0.01	0.3
Miscellaneous	0.12	5.4	20	4.7
Total area cropped	212	262	304	229
Area double cropped	0.8†	1	1.1	1.7

* Four years. † Seven years.

The average rates of rent per acre for land suited for rice are maximum Rs. 4-8-0, minimum Rs. 1-8-0; for land suited for inferior grains, maximum Rs. 1-12-0, minimum R. 0-3-0; for land suited for coffee, maximum Rs. 2-4-0, minimum R. 0-8-0. The rate of wages in 1901 was R. 1 a day for skilled and 6 annas for unskilled labour. In 1881 the respective rates were R. 1 and 4 annas; and in 1891 they were 12 annas and 5 annas.

PRICES OF STAPLE FOOD-GRAINS, ETC., IN COORG

(in Seers per Rupee)

	1880.	Average for ten years ending	
		1890.	1900.
Rāgi . . .	30·13	30·5	22·7
Rice . . .	16·10	15·4	11
Gram . . .	25·11	23·1	15·5
Salt . . .	8·5	10·1	9·6

Forests.

The Forest department is in charge of a Deputy-Conservator. The 'reserved' forests in 1904-5 covered an area of 409 square miles. The other 'protected' tracts are: Ghāt forests, 293 square miles; Devara-kādu or sacred groves, 24 square miles; Ur-udve or village forests, 14 square miles; and Paisāri or Government waste, 269 square miles. The last have now been placed under the Revenue department. The Ghāt forests in the west are known as Male-kādu, and lie in the evergreen belt. One of the finest trees here is the poon-spar (*Calophyllum tomentosum*). *Vateria indica*, *Calophyllum elatum*, *Michelia Champaca*, *Garcinia Morella*, *Cinnamomum iners*, *Diospyros Ebenum*, *Artocarpus hirsuta*, *Cedrela Toona*, *Acrocarpus fraxinifolius*, and *Mesua ferrea* are some of the most conspicuous and useful trees in this belt. The dense undergrowth in these forests is so thorny and tangled that they can be penetrated only by beaten paths under the direction of an experienced guide. Owing to their inaccessibility these forests are but little worked. The forests to the east are termed Kanave-kādu, and are composed mainly of deciduous trees and immense clumps of bamboo. *Dalbergia latifolia*, *Terminalia tomentosa*, *Pterocarpus Marsupium*, *Tectona grandis*, *Santalum album*, and other trees are found here. *Mangifera indica*, *Artocarpus hirsuta*, *Lagerstroemia lanceolata*, and *Bombax malabaricum* tower above the others. The tamarind (*Tamarindus indica*) is found only in a few places along the Cauvery river between Fraserpet and Somvārpet. The 'reserved' forests in this belt are being systematically worked, the timber finding a ready sale in Mysore. The four large Ghāt blocks have been settled, and rules framed for protecting the

forest glades called *mandus* and *ambalas*, which are Coorg places of assembly. Grazing has been restricted to six months in the year on prescribed areas at reduced fees, but free grazing is permitted to those who had a customary right to it. Free grants of forest produce are made to deserving ryots.

Besides what is realized from minor produce, the revenue from cardamoms is credited to forests. The Kurumbas receive rewards for weeding and raising teak plants on spaces that have been used for *kumri* cultivation. The following table shows the forest revenue and expenditure :—

	Average for ten years ending		1900-1.	1903-4.
	1890.	1900.		
	Rs.	Rs.	Rs.	Rs.
Revenue . .	1,07,194	1,50,262	1,39,567	2,24,053
Expenditure .	69,810	79,806	70,906	92,191
Surplus . .	37,384	70,456	68,661	1,31,862

There are no mines in Coorg, and the only minerals produced are granite for road-metal and building, laterite for the same purposes, and clay for bricks and tiles. The estimated quantity of these extracted in 1901 was 9,805 tons of granite, 287 tons of laterite, and 940 tons of clay.

Some prospecting for gold took place when the Wynaad mines were being explored, but on the failure of these the matter was dropped. In 1898 mica was discovered in the pegmatites in the south. Sheets 30 inches across were obtained, but the commercial value has not been such as to induce much effort in regard to it. Graphite occurs in small quantities. The fee for a licence to prospect for minerals is Rs. 5.

Trade and communications.

There are no manufactures in the larger sense of the term. The Coorg knives, some of which are highly finished and handsomely ornamented, are the only articles made in the country worthy of notice. The girdle-scarfs with ornamental borders worn by the Coorgs are made at Sirangala on the north-east frontier. Coarse cotton cloths are woven in north Coorg, with a finer kind at Sanivārsante.

The only factory employing a number of hands is the distillery near Fraserpet, the output of which has been greatly diminished since the depression in coffee. Tile and pottery works were opened in Mercāra in 1882 and carried on till 1898.

Somvārpet and Kodlipet are places of some trade. The largest weekly markets are held at Gonikoppal, Ammatti, and Siddapur, in south Coorg; and at Suntikoppa and Santivārsante, in north Coorg.

The chief imports are *rāgi*, gram, rice, pulses, live-stock, sugar, salt,

oils, and piece-goods. The principal exports are coffee, cardamoms, rice, oranges, timber, sandal-wood, and hides.

The table on the next page shows statistics of the value of imports and exports, in thousands of rupees.

There are no railways; but a line from Mysore to Tellicherry on the west coast has been surveyed, which would pass across Coorg from north of Fraserpet in the east to south of the Periambadi *ghāt* in the west. From Periāpatam in Mysore trunk-roads run west through Fraserpet and Mercāra by the Sampaji *ghāt* to Mangalore on the coast, and through Siddapur and Vīrarājendrapet by the Periambadi *ghāt* to Tellicherry, with a branch from Siddapur to Mercāra. There is also a road from Hunsūr in Mysore through Titimati to the Periambadi *ghāt*. A main road runs longitudinally through Coorg from Mercāra north through Somvārpet to Kodlipet, and south through Vīrarājendrapet, Gonikoppal, and Hudikeri to the Wynaad frontier. Local tracks or footpaths cross the country in all directions. The length of Imperial roads in 1904 was 215 miles, of which 143 were metalled. The length of Local fund roads, unmetalled, was 130 miles.

The Postal department is under the control of the Postmaster-General of Madras. Since 1894 the foreign and outside mails have been carried by tonga *dāk* from the railway at Mysore to Mercāra. In 1901 the District post was transferred to the management of the newly formed District board, and in 1906 re-transferred to the control of Government. The number of post offices in 1904–5 was 27. The mails were carried over 262 miles. The number of letters delivered was 420,000, of postcards 168,000, and of newspapers 68,000. Money orders were issued to the value of $3\frac{1}{2}$ lakhs. Savings banks deposits amounted to Rs. 56,000 and withdrawals to Rs. 55,000. There are seven telegraph offices, which are combined with the larger post offices.

Administration.

The Province is directly under the Government of India, and administered by the Chief Commissioner of Coorg, who is the Resident in Mysore, with head-quarters at Bangalore. In him are combined all the functions of a Local Government and High Court. The Secretariat is at Bangalore, where the First Assistant Resident is styled the Secretary to the Chief Commissioner of Coorg.

In Coorg itself the chief authority is the Commissioner, whose head-quarters are at Mercāra, and whose duties practically extend to every branch of the administration. In the Revenue department he has the help of two Assistant Commissioners and an Assistant Superintendent of Land Records. Of the two Assistant Commissioners, one is a European with head-quarters at Mercāra, invested with specified revenue powers in certain *tāluks* (Yedenālknād and Kiggat-

IMPORTS AND EXPORTS, COORG

	1890-1.	1900-1.	1903-4.
Imports.			
Agricultural implements	20	5	10
Animals, living	1,11	1,05	1,25
Apparel, haberdashery, and millinery	3	10	12
Arms and ammunition	4	2	8
Books, prints, maps and charts	4	2	2
Building and engineering material	20	4	10
Candles	2	1	2
Coir, manufactured	4	2	3
Cotton	1	1	2
,, manufactured piece-goods	1,00	80	1,25
Drugs and medicines	19	16	19
Earthenware	1	1	38
Flax manufactures and ropes	4	1	2
Fruits and vegetables	53	25	25
Glass and glass-ware	4	4	7
Grain	2,00	4,00	3,50
Gums and resins	1	1	2
Hardware and cutlery	3	12	18
Leather manufactures	3	3	4
Liquors	79	35	46
Machines, &c.	2	1	3
Metals	15	7	10
Oils	91	1,40	2,60
Paper and pasteboard	6	4	4
Provisions	2,17	1,00	1,25
Salt	2,00	1,25	1,40
Silk	6	1	3
Spices	58	35	60
Sugar, &c.	86	1,35	1,10
Tobacco	20	16	35
Umbrellas	9	9	12
Wood and timber manufactures	11	3	25
Wool and woollen manufactures	40	15	28
Sundries	67	85	1,15
Treasure	2,47	14,10	5,00
Government stores	7	14	25
Total	17,18	28,10	22,65
Exports.			
Cardamoms and spices	54	38	48
Coffee	25,55	20,00	25,90
Drugs	1	½	½
Fruits	7	9	12
Grain and pulse	25	1,25	2,70
Hides and horns	30	24	24
Wax	1	1	2
Wood (including sandal-wood)	1,04	1,19	1,99
Total	27,77	23,16½	31,45½

nād), and the other is a Coorg, who is a Personal Assistant to the Commissioner in dealing with vernacular correspondence and for such special duties as may be assigned to him. The Assistant Superintendent of Land Records, besides maintaining those, attends to Survey and Revenue Settlement matters. He is also Assistant Director of Agriculture.

For administration the country is divided into five *tāluks*, each under the control of a *sūbedār*. These are NANJARĀJPATNA (which since 1894 has included the old Yelusāvirashīme *tāluk*), MERCĀRA, PĀDINĀLKNĀD, YEDENĀLKNĀD, and KIGGATNĀD. Each *tāluk* is subdivided into *nāds*[1] (of which there are nineteen, averaging 83 square miles in extent), each *nād* into circles (*māgani*), and each circle into villages (*grāma*). The official in charge of a *nād* is called the *parpattigar*, whose chief duty is the collection of the revenue, in which he is assisted by accountants called *shānbhogs*. The principal village official is the headman or *pātel*.

JUDICIAL STATISTICS, COORG

	Average for ten years ending			
	1890.	1900.	1901.	1904.
Civil.				
Suits for money and movable property	2,985	3,107	1,750	1,349
Title and other suits . .	128	162	153	135
Total	3,113	3,269	1,903	1,484
Criminal.				
Number of persons tried:—				
(*a*) For offences against person and property . .	1,825	1,653	979	622
(*b*) For other offences against the Indian Penal Code	618	1,022	553	1,406
(*c*) For offences against special and local laws .	866	1,207	937	515
Total	3,309	3,882	2,469	2,543

In his civil capacity the Commissioner exercises the original and appellate powers of a District court. By the Coorg Courts Regulation which came into force in 1901 a Subordinate Judge was appointed, on whom falls the greater part of the work which used to come before the District court. The five *sūbedārs* were at the same time relieved of civil powers, while the jurisdiction of the two Munsifs was extended by the addition of Small Cause powers. The Subordinate Judge thus

[1] In the north of Coorg the *nād* is termed a *hobli*, as in Mysore.

tries original suits, and hears appeals transferred to him by the Commissioner. The only other Civil Courts are those of the Assistant Commissioner and the Munsifs of Mercāra and Vīrarājendrapet, whose powers extend to original suits limited respectively to Rs. 3,000 and Rs. 1,000. The Small Cause powers of the Munsifs are limited to Rs. 50.

The Commissioner is the District and Sessions Judge. Appeals lie from him to the Chief Commissioner in his capacity of Judicial Commissioner, while he is himself the court of appeal from the European Assistant Commissioner and the Subordinate Judge. The former is the District Magistrate, and exercises general supervision over the Subordinate Judge, who is a first-class magistrate, and over the seven second-class magistrates, namely, the Munsifs of Mercāra and Vīrarājendrapet and the five *tāluk sūbedārs*.

The registration offices, of which there are nine, are each under a sub-registrar, and are supervised by the Subordinate Judge in his capacity as Registrar of Coorg, subject to the orders of the Commissioner, who is the Inspector-General of Registration. The average number of documents registered from 1881 to 1890 was 786, and from 1891 to 1900 1,954; in 1901 the number was 1,491, and in 1904 1,489.

The treasury administration is in charge of the Subordinate Judge in his capacity as Treasury officer at head-quarters, under the general control of the Commissioner, and in direct subordination to the Comptroller, Indian Treasuries. The financial transactions all come under the head Imperial, with the exception of those relating to municipal, village service, or Local fund matters.

PRINCIPAL SOURCES OF ORDINARY REVENUE, COORG

(In thousands of rupees)

	Average for ten years ending		1900-1.	1903-4.
	1890.*	1900.		
Land revenue	3,27	3,77	3,58	3,75
Stamps	82	91	54	43
Excise	1,55	2,45	1,90	1,83
Provincial rates	...	36‡	7	7
Assessed taxes	10†	12	10	8
Forests	1,08	96	80	91
Registration	4	7	4	4
Other sources	54	72	48	40
Total	7,40	9,36	7,51	7,51

* Nine years. † Four years. ‡ Five years.

EXPENDITURE UNDER PRINCIPAL HEADS, COORG

(In thousands of rupees)

	Average for ten years ending		1900-1.	1903-4.
	1890.*	1900.		
Opening balance	3,90	3,87	2,54	5,95
Charges in respect of collection (principally land revenue and forests)	1,90	2,22	1,59	1,71
Salaries and expenses of civil departments :—				
(*a*) General administration	36	37	57	49
(*b*) Law and justice	48	51	51	54
(*c*) Police	21	29	35	43
(*d*) Education	32	35	38	21
(*e*) Medical	8	21	15	...
(*f*) Other heads	18	11	4	1,77
Pensions and miscellaneous civil charges	8 †	9	8	10
Famine relief	...	...	...	...
Irrigation	...	8 ‡	...	...
Public works	1,41	1,80	3,24 §	3,40
Other charges and adjustments	42	21	15	4
Total expenditure	5,44	6,24	7,06	8,69
Closing balance	3,54	3,73	1,81	2,25

* Nine years. † Seven years. ‡ Only 1896-7.
§ Of this, 117 was for special work in Bangalore.

The chief land tenures are the *jama* and the *sāgu*. The former is confined to a privileged class called *jama* ryots, who are either Coorgs, Gaudas, Moplahs, or occasionally Brāhmans. It is described as a proprietary tenure, distinguished by paying only half the ordinary assessment, or Rs. 5 per 100 *bhattis*. A *bhatti* of land is an area capable of producing a *bhatti* of paddy, which is thus strictly a measure of volume, but 100 are roughly held to be equivalent to 3 acres, though the area really varies with the quality of the soil. *Jama* land is held on condition of rendering service to the state if required, which now consists principally of escorting treasure, or assisting the revenue officers when on tour. Such land cannot be sold, mortgaged, or alienated in any way without the sanction of Government. For every *jama* farm a *sanad* is granted, for which a succession fee called *nazar kānikē*, of Rs. 10 per 100 *bhattis*, is paid in three yearly instalments. On taking possession a fee of R. 1, called *ghatti jama*, is paid, and with the delivery of the *sanad* the Commissioner gives to the grantee a handful of the soil. Similarly, if the holder wishes to resign his *jama*, he lays down a handful of the soil and returns the *sanad*. *Jama* land cannot be sublet without the permission of Government, and cannot

be held by a woman unless she provides an efficient substitute from among the male members of the family in case of service being required. The ordinary tenure is the *sāgu*, which is *ryotwāri* with no condition of service. The assessment payable is Rs. 10 per 100 *bhattis*.

A rice holding under either tenure is called a *varg*, and the holder a *vargdār*[1]. Each rice *varg* in Coorg proper had generally a *bāne* attached, which was forest land held free of assessment, for grazing, leaf-manure, firewood, and timber required for the use of the *varg*. While the rice-fields were carefully measured, the *bānes* were not measured nor were their boundaries fixed. When coffee was introduced, these suddenly became of great value, sometimes more valuable than the rice lands to which they were attached. The boundaries not being defined, the people encroached on large tracts belonging to Government, and alienated land wholesale to planters, or felled the timber and opened out plantations themselves, entirely destroying their usefulness as *bāne* for the *varg*. To check this the ryots were allowed to cultivate coffee in their *bānes* up to an area of 10 acres free of assessment, but beyond that the *bānes* are assessed at Rs. 2 an acre if the forest has been felled and coffee cultivated thereon.

There are also some lands held as *jāgīr* or rent-free, and others as *umbli*, or at reduced rates from R. 1 to Rs. 3 per 100 *bhattis*. The latter are in recognition of services rendered in the time of the Rājās by the original grantee, or in north Coorg as part remuneration of the *pātels* for public service. Some religious establishments and a few village headmen hold lands on *jodi* or favourable tenure, paying half the ordinary rate.

Waste land taken up for coffee cultivation is free of assessment for four years; from the fifth to the twelfth year inclusive it is charged R. 1 an acre, and after that Rs. 2. Waste land other than 'reserved' forest or tracts set apart for communal purposes is ordinarily sold by public auction under the Waste Land Rules. But if required for rice cultivation, it is given to the applicant considered to have the best claim, subject only to payment of the value of the timber growing on it; the revenue is also remitted or reduced for a term of years, with reference to the period for which the land has previously been out of cultivation.

Kumri cultivation, which consists in felling the forest, raising a few crops on the rich virgin soil, and moving on to a fresh patch of forest after two or three years, was for some time strictly prohibited. But it is now allowed to a small extent in Sampaji-Tavunād in the Padinālknād *tāluk* in favour of certain wild tribes accustomed to this method of cultivation. Ten acres a year is the limit beyond which no ryot can resort to this system, and Rs. 2 an acre is levied on the land cleared for the purpose.

[1] These terms generally appear as *warg* and *wargdār* in official reports.

Clearings in the evergreen forest on and below the Ghāts for the growth of cardamoms are restricted to one-sixth of an acre. Cardamom *males*, as these hills are called, are taken on lease for periods varying from three to twenty-one years; but owing to the fall in the price of this product the industry has decayed, and heavy remissions of revenue have been necessary.

In 1806 Dodda Vīra Rājā made a settlement of the old Yelusāvirashīme *tāluk* and of a part of the Nanjarājpatna *tāluk*. But in 1812 Linga Rājā had a careful register prepared of all the revenue assessed lands in Coorg. Rice land only was assessed, and the Government share was fixed at one-tenth of the produce. Details are given in the accounts of every *varg* or holding, and the position of the attached *bāne*, *barike* (swampy ground for grazing), and *hittalmane-dala* (building site); but for these adjuncts no measurements or boundaries are supplied, which gave rise to endless disputes.

The settlement on the basis of the recent survey was begun in 1894, but proceeded very slowly, owing to the high standard of work adopted under some misapprehension of the wishes of the Government of India. An interim summary procedure was therefore ordered towards the close of 1895, and new rates were levied from 1896, to remain in force for ten years to 1906. Unassessed areas discovered by the survey were thus brought under settlement, and the existing rates on ordinary 'wet' and 'dry' cultivation were raised all round by one anna in the rupee. An increase of Rs. 60,000, or nearly 20 per cent., resulted in the land revenue, more than three-fourths representing assessment at the old rates on unauthorized encroachments, many of which had been cultivated surreptitiously for years. Of the rest, Rs. 11,900 was the increase due to the enhanced rate of one anna in the rupee. The principal object in imposing this was to assert the right of the state to raise the assessment on *jama* lands, in respect of which the holders had advanced a claim of permanent settlement, disallowed by the Government of India. The average rates on fully assessed 'wet' and 'dry' lands are respectively Rs. 3-0-2 and R. 0-9-10 per acre, which compare favourably with those in force in the adjacent parts of Mysore and Madras.

The summary settlement gave rise to considerable discontent at the time, owing to the season when it was introduced being unfavourable, in addition to which coffee was declining and the money market was tight. But this feeling was chiefly confined to the holders of *jama* land, who objected to what they contended was an alteration in their permanent settlement. As a measure of relief, two antiquated taxes called *dhūli* and *mohatarfa* were abolished; and since 1898 all appearance of combined agitation has disappeared, from which it may be assumed that the settlement involved no real burden on the cultivator.

In 1881–2 the total revenue was 7·12 lakhs, of which the land revenue yielded 3·46 lakhs. In 1900–1 the total revenue was 7·51 lakhs and the land revenue 3·58 lakhs. In 1903–4 they were 7·51 and 3·75 lakhs respectively.

The Excise revenue is chiefly derived from arrack and toddy, under the heads licence fees, still-head duty, and rent of toddy-trees. Other items are opium and *gānja*. As an effect of the continued agricultural depression, there is an increasing tendency to the consumption of toddy as being cheaper than arrack. The only distillery is at Madapatna near Fraserpet. The rate of duty is Rs. 4–1–1 per gallon, and the quantity issued in 1904–5 was 36,797 gallons, at 20° under proof, equivalent to 29,273 gallons at London proof. The number of wholesale licences granted was 3 for sale of European liquors and 4 for arrack. The number of retail shops was 6 for sale of European imported liquors (which includes the 3 wholesale shops), 45 for arrack, and 292 for toddy. A systematic reduction has been made in the number of arrack and toddy shops, with reference to local requirements. The amount of opium issued was 32 seers 52 tolas, at Rs. 57–8–0 per Madras seer, the average retail price being Rs. 60 per seer. The wholesale supply of *gānja* is arranged for departmentally, as owing to the heavy duty payable on the drug no contractor is forthcoming. About 816 seers were issued to 5 licensed vendors, at an enhanced price of Rs. 5 per seer. The net excise revenue during the decade 1881–90 averaged 1·52 lakhs, and during the decade 1891–1900, 2·39 lakhs; in 1900–1 the amount was 1·84 lakhs, and in 1904–5 1·73 lakhs. The terms of a new contract and the abolition of *ābkāri* cess account in great part for the decrease.

The net revenue from stamps was: judicial Rs. 57,000, non-judicial Rs. 22,000 in 1881–90 (average); Rs. 65,000 and Rs. 24,000 in 1891–1900 (average); and Rs. 40,000 and Rs. 12,000 in 1900–1. In 1903–4 the figures were Rs. 32,000 and Rs. 12,000. The decline is due to the decrease of trade and the fall in the value of landed property owing to the depression in coffee-planting, the chief industry of the Province.

The net revenue from income tax for 1886–90 averaged Rs. 10,137 a year, and for 1891–1900 Rs. 11,745; for 1900–1 it was Rs. 10,344, and for 1903–4 it was Rs. 8,000, the number of assessees being 202.

Since 1901 Local funds have been administered by a District board, composed of 9 nominated, 2 elected, and 5 *ex-officio* members, under the presidency of the Commissioner. Their duties include the maintenance of roads and ferries, diffusion of primary education, and upkeep of dispensaries, travellers' bungalows, and cooly shelters. The revenue consists of tolls, and market and pound fees, previously credited to the old District fund, supplemented by (*a*) a new local cess of one anna in the rupee of land revenue assessment, (*b*) *mohatarfa* or profession tax payable by non-agriculturists, and (*c*) primary school fees.

Income and Expenditure of District Fund, Coorg

	Average for ten years 1891–1900.	1900–1.	1903–4.
Income from	Rs.	Rs.	Rs.
Local rate	...	...	30,861
Tolls on roads and bridges	22,532	20,062	21,312*
Miscellaneous	3,958	4,120	3,222
Pounds	3,610	3,381	2,796
Ferries	1,864	2,126	...
Mohatarfa	...	...	5,172
School fees	...	...	3,295
Total income	31,964	29,689	66 658
Expenditure on			
Refunds	67	5	...
General administration	6,806	9,883	6,557
Medical	1,282	...	4,219
Public works	24,806	18,221	32,824
Education	...	...	16,386
Post	...	...	7,194
Total expenditure	32,961	28,109	67,180

* Includes ferries.

Income and Expenditure of Municipalities, Coorg

	Average for ten years 1891–1900.	1900–1.	1903–4.
Income from	Rs.	Rs.	Rs.
Tax on houses and lands	Details not available	6,007	9,040
Other taxes		19,326	8,868
Rents		...	4,587
Loans		2,500	5,873 ‡
Total income	32,789 *	27,833	28,368
Expenditure on			
Administration and collection of taxes	Details not available.	1,425	2,493
Public safety		1,452	692
Water-supply and drainage:—			
(*a*) Capital		3,649	600
(*b*) Maintenance		437	361
Conservancy		7,356	9,423
Hospitals and dispensaries		9,015	9,021
Public works		3,265	1,715
Education		2,393	2,788
Other heads		1,891	5,561
Total expenditure	33,644 †	30,883	32,654

* Includes private donations and contributions, Rs. 9,185; Government loan, Rs. 5,000. † Includes Rs. 48,105 expended on water-supply between 1892 and 1896. ‡ Grants.

The number of municipalities in Coorg is 5, with 57 members, of whom 18 are *ex officio*, 32 nominated, and 7 elected. The last are all in Mercāra, which is much the largest. All the members are natives except 5: namely, 3 in Mercāra and 2 in Vīrarājendrapet. The minor municipalities are Fraserpet, Somvārpet, and Kodlipet, which are little more than villages; and it is proposed to constitute them 'notified areas,' in accordance with the Central Provinces Municipal Act of 1903.

At the head of the Public Works department is the Executive Engineer, under the orders of the Commissioner. The chief branch is the maintenance of communications, which is attended with special difficulty on the Ghāts. Other works include public buildings, irrigation projects, and repair of tanks. The principal water-supply scheme has been for Mercāra, carried out between 1892 and 1896.

A Coorg class regiment was formed as an experiment in 1902, by conversion of the 11th Madras Infantry, with head-quarters at Mercāra, but proving unsuccessful has been disbanded. The Volunteer force is represented by the Coorg and Mysore Rifles, with head-quarters at Mercāra. Its strength in 1904 was 245. Camps of instruction are held periodically.

The police are in charge of a European Assistant Superintendent from Madras. The force in 1904 was composed of 4 inspectors, 28 head constables, and 191 constables, of whom 40 are provided with fire-arms. Of the officers, 16 are Coorgs and 3 are Gaudas; of the constables, 71 are Coorgs, 10 are Heggades, and 31 are Gaudas.

STATISTICS OF COGNIZABLE CRIME

	Average for five years ending 1901.
Cases reported	870
" decided in the criminal courts	477
" ending in acquittal or discharge	101
" " conviction	211

The Jail department is under the Civil Surgeon of Mercāra, who is also Superintendent of the jail. The jail at Mercāra practically contains all the convicts in the Province, the *tāluk* lock-ups being used only for persons under trial and prisoners sentenced for a few days. There is accommodation in the jail for 151 prisoners, and the average daily number in 1904 was 68. In the *tāluk* lock-ups there was a daily average of 3. Taking into account the receipts from jail manufactures, the cost per prisoner in jail was Rs. 37·18. Their most profitable labour is in the printing press[1], and road-making, on which the extramural gangs are chiefly employed.

[1] The printing press has since been transferred to the control of the Commissioner.

On the annexation of the country in 1834, Anglo-vernacular schools were established by Government at Mercāra and Vīrarājendrapet, with a Kanarese school at Hatgatnād. A school at Fraserpet was endowed by Colonel Fraser. In 1842 the Vīrarājendrapet school was superseded by one opened by the Roman Catholics, to which community all the pupils belonged. In 1843 the educational grant was redistributed, and 21 Kanarese schools were opened in the different *nāds*, the masters being paid Rs. 2½ a month. In 1854 the Rev. Dr. Moegling of the Basel Mission offered to superintend the schools and open superior ones if supplied with funds by Government. He was allowed in 1855 to take charge of the Mercāra English school, but only one Coorg youth could be induced to attend. In 1857 the Mysore Educational department was established, and Coorg was placed under its supervision. By 1862, the Coorgs had withdrawn their opposition to the school, and came forward with a petition to Government, offering to build and endow a boarding-house for 100 boys, as well as one for girls, in connexion with the central school at Mercāra. Government helped the scheme liberally, and the building of the new school premises and boarding-houses was brought to completion in 1870. The endowment consisted of a coffee plantation of 301 acres in Yedenālknād, the land for which was a free gift from Government. But some of the enthusiasm which prompted the petition seems by this time to have subsided, and the Coorgs objected to allow their children to be educated away from their homes. An Anglo-vernacular school was therefore established in each *tāluk* to act as a feeder for the central school. Vīrarājendrapet, Hudikeri, Fraserpet, and Napoklu were thus occupied in 1870 and 1871. The Kanarese schools, the masters for which had meanwhile been undergoing training, had increased to 27, and were popular. In 1872 the Government of India decided that primary education should be supported by local taxation, which, at the express wish of the Coorgs, was provided from a plough tax. This was found insufficient, and was supplemented by a grant from Government equal to half the amount. Eventually some of the schools were made municipal schools and the remainder were supported by Imperial revenues, fees being levied in all from 1886. The head master of the Mercāra central school had been inspecting vernacular schools, and in 1883 also became Inspector of the Western Circle of the Madras Presidency. In 1888 he was relieved entirely of the school work, to the charge of which a graduate from Cambridge was appointed, the Inspector paying periodical visits to Coorg. Since 1899 the Inspectress of Girls' Schools in the Western Circle has also visited Coorg, and the control of education vested in the Local Government has been exercised through the Director of Public Instruction in Madras. In 1901 primary education

Education.

(now increased to 7 grains) was sold through the agency of post offices to the number of 48,756 packets in 1903-4.

There are 8 vaccinators, two employed in Mercāra and Vīrarājendrapet under the municipalities, and the others in rural areas. Vaccination is also performed by the ordinary medical staff of the Mercāra jail and the dispensaries. The annual average number of successful vaccinations for fifteen years ending 1901 was 8,496, and the average annual ratio of deaths from small-pox for the same period one per 1,000 of the population.

MEDICAL STATISTICS, COORG

	1881.	1891.	1901.	1904.
Hospitals, &c.				
Number of civil hospitals and dispensaries	2	4	8	7
Average daily number of—				
(*a*) In-patients	28	23	48	30
(*b*) Out-patients	162	131	197	191
Income from—				
(*a*) Government payments . Rs.	3,213	1,543	3,336	6,163
(*b*) Local and municipal payments Rs.	268	7,817	10,231	6,895
(*c*) Fees, endowments, and other sources . Rs.	3,647	2,004	1,764	1,195
Expenditure—				
(*a*) Establishment . Rs.	2,207	4,331	8,178	8,085
(*b*) Medicine, diet, buildings, &c. Rs.	5,240	7,033	7,153	6,168
Vaccination.				
Population among whom carried on	4,887	8,237	12,049	180,607
Number of successful operations	4,404	7,699	10,863	9,689
Ratio per 1,000 of population	24·70	40·18	60·02	52·01
Total expenditure on vaccination Rs.	1,174	2,538	2,836	2,769
Cost per successful case . Rs.	0-4-3	0-4-6	0-4-4	0-4-8

Survey.

The first survey was made for merely geographical purposes by Lieutenant Conner in 1817. A topographical survey of the Province, and also a survey of all coffee estates held under the Waste Land Rules, was made between 1862 and 1874 by the Madras Revenue Survey. In 1885 it was proposed to make a complete survey and settlement on the Bombay system, to be carried out by the Mysore Revenue Survey. Work began at the end of 1887 and continued till May, 1888, in which time 82 villages with an area of 23,549 acres had been measured. But on financial grounds further operations were stopped, and in 1890 another scheme, similar to one which had been successful in the United Provinces, was adopted. The survey was concluded in October, 1892; but the demarcation of details, such as subdivisions of holdings and the preparation of complete records, was carried on by the Land Record department, and brought

to an end only in 1902. The system of training *shānbhogs* or village accountants for field work has proved successful.

[B. L. Rice : *Gazetteer of Coorg* (1878 ; volume iii of *Mysore and Coorg*).—Rev. G. Richter : *Ethnographical Compendium of the Castes and Tribes found in the Province of Coorg* (Bangalore, 1887).—Lieutenant Conner : *Memoir of the Codugu Survey* (Bangalore, 1870). —Rev. Dr. Moegling : *Coorg Memoirs* (Bangalore, 1855 ; German enlarged edition, 1866).—Captain Le Hardy : *Report on Coorg* (1834).]

Coorla.—Town in Salsette island, Thāna District, Bombay. *See* KURLA.

Cooum (*Kūvam*).—River in Madras, formed by the junction of the surplus waters of a tank in the village of Kūvam in the Conjeeveram *tāluk* of Chingleput District and the old Bangāru channel. It irrigates Kadambuttūr, Tinnanūr, and other villages, and from a dam thrown across it at Korattūr sends down a supply to the Chembrambākam tank through the new Bangāru channel. It then irrigates Vayanallūr, Ayanambākkam, and other villages of the Saidapet *tāluk*, and finally flows through the heart of Madras City into the Bay of Bengal near Fort St. George. In the latter part of its course the stream (except in the rains) is insufficient to keep an open channel, and a sand-bar forms across the mouth, converting the river into a brackish lagoon. At present some of the sewage of Madras passes into this, and the stream has thus obtained an unsavoury reputation. The new drainage scheme for the city will, however, remove the sewage to a farm to the north, and effect, it is hoped, a great improvement in the present condition of the lower reaches of the river.

Coringa.—Village in the Cocanāda *tāluk* of Godāvari District, Madras, situated in 16° 48′ N. and 82° 14′ E., at the mouth of the northernmost branch of the Godāvari, 8 miles by road from COCANĀDA. Population (1901), 4,258. Coringa was an early Dutch settlement, and was formerly the principal seaport on this coast. In 1802 a dock was constructed in which vessels of the Royal Navy could be repaired, and sea-going vessels were also built here. Owing to the silting up of the Godāvari estuary, however, its trade rapidly declined and not a single vessel entered the port during the year 1900–1. In 1881 shipping amounting to 6,717 tons touched here. Shipbuilding is still carried on at the village of Tallarevu close by, and there is a large rice-husking factory at Nīlapalli five miles away. Coringa suffered severely from the cyclone of 1832, and has twice (in 1787 and 1832) been nearly swept away by tidal waves.

Coromandel Coast.—A name applied in the old histories and official correspondence to the east coast of the Madras Presidency. The term was used in no very definite sense and has now fallen into

was placed under the newly constituted District board, and in 1905 the supervision of all the schools in Coorg was transferred to the Madras[1] Inspector of European and Training schools.

In 1903-4 there were 88 public and 33 private institutions, attended in all by 4,599 pupils (3,632 male, 967 female). Male scholars were 15·7 per cent. of the male population of school-going age, and female scholars 4·5 per cent. of the female population of that age. In the census returns of 1901, 78 in every 1,000 were entered as literate, that is, could read and write. The proportion for males was 128, and for females 16. Taking the Coorgs alone, 162 in 1,000 were literate, the ratio for males being 284, and for females 37, almost the whole being literate in Kanarese.

All except 3 of the schools are primary. These number 85, of which 6 are municipal, 75 are under the District board, and 4 are aided. Three of the former and one of the latter are schools for girls. Model primary schools are being established at the head-quarters of the Pādinālknād, Kiggatnād, and Nanjarājpatna *tāluks*; and three girls' schools are to be opened at Kunda, Ammatti, and Nalkeri. A pleasing feature of the Coorg *nād* schools is that they are freely attended by girls as well as boys, both learning side by side in the same classes. But no girls go alone; they accompany their brothers or other near relatives, and are in the proportion of about one girl to four boys. Instruction in the vernacular is compulsory, but in six schools some learn English also, for which they pay an extra fee. The primary school course occupies five years. The only special school is a training school at Mercāra for masters of primary schools, to which are attached stipends for 13[2] students. Six for girls have also now been provided, with the view of training schoolmistresses.

For secondary education there are two schools. That at Vīrarājendrapet is of the lower stage, while the other, at Mercāra, is a high school or of the upper secondary stage. In these the instruction is in English, and in 1904 they had 501 pupils, of whom 7 were girls. The number in the upper secondary stage was 98. The standard aimed at is that of the matriculation examination of the Madras University, for which Mercāra is a local centre. In the last twenty years 115 have matriculated, including 32 in the last five years. For students who wish to carry on their studies farther, scholarships are provided, tenable at the colleges in Bangalore, Mysore, or Madras. A few who have gone out of Coorg for higher education have risen to important positions in Mysore. The Mercāra high school has a well-managed boarding-

[1] The supervision has since been transferred to the Inspector of Schools of the VIth Circle with head-quarters at Calicut, owing to the reorganization of the inspecting agency in the Madras Presidency.

[2] The number of stipends has been increased to 26.

house attached to it, with accommodation for 60 pupils, most of whom received stipends of Rs. 1 or Rs. 2 a month from Government towards the cost of board. These were redistributed in 1905 so as to provide twenty upper secondary stipends of Rs. 3 a month, and ten lower secondary of Rs. 2 a month. The School Endowment Plantation fund pays for the servants, for a midday meal for the boarders, and contributes towards the school library.

There are no separate schools for Europeans and Eurasians, but a few Eurasian children attend the ordinary schools. For Muhammadans two schools are maintained from municipal funds, and ten free scholarships are provided for those desiring to learn English at Vīrarājendrapet or Mercāra. There is also a private school at Ammatti. The number of Muhammadan pupils in 1905 was 188. For Pariahs seven schools have been opened, which are attended by 128 pupils.

The aided schools are four for boys and one for girls, established by the Roman Catholics and the Basel Mission. They are all primary schools, and contain 304 boys and 63 girls. The private unaided schools are 25 in number, with a reported attendance of 517 pupils, of whom 70 are girls. They are very elementary.

The total number of pupils under instruction in 1880–1 was 2,792; in 1890–1 it was 4,795 (4,059 males, 736 females); in 1900–1 it was 4,723 (3,818 males, 905 females), the temporary decline being due to the high price of food and stricter levy of fees. In 1904–5 the total was 4,485, of whom 1,020 were girls.

The following table shows the expenditure on education in 1903–4:—

	Provincial funds.	District and municipal funds.	Fees.	Other sources.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.
Training and special schools	1,691	...	...	...	1,691
Secondary boys' schools	6,343	...	6,567	60	12,970
Primary boys' schools	1,440	12,516	3,698	970	18,624
Girls' schools	...	1,478	84	218	1,780
Total	9,474	13,994	10,349	1,248	35,065

Medical.

There are two civil hospitals in Coorg, at Mercāra and Vīrarājendrapet; and six dispensaries, at Napoklu, Gonikoppal, Somvārpet, Suntikoppa, Siddapur, and Pollibetta. These dispensaries are Local fund institutions, except the last, which is a private one. The number of patients treated in 1904 was 44,400. The chief causes of death among patients are fevers, diseases of the lungs, and other general diseases. Quinine in 5-grain packets

disuse. The derivation of Coromandel has been the subject of some discussion, but it is now generally held to be a corruption of Cholamandalam, 'the country of the Cholas.'

Cossimbazar (*Kāsimbāzār*).—Decayed town in the head-quarters subdivision of Murshidābād District, Bengal, situated in 24° 8′ N. and 88° 17′ E., on the Bhāgīrathi, and now included in the Berhampore municipality. Population (1901), 1,262. This town, the site of which is now a swamp marked by a few ruins, may lay claim to an historical interest superior even to that of the city of Murshidābād. Long before the days of Murshid Kulī Khān, who founded and gave his name to the latter city, the trade of Bengal centred at Cossimbazar, and the different European nations who traded to India had factories here from very early times. The common name for the Bhāgīrathi in English records down to the early years of the nineteenth century was the Cossimbazar river; and the triangular tract enclosed by the Bhāgīrathi, Padmā, and Jalangī was known in the early days of the Company as the Island of Cossimbazar. The place is said to derive its name from a legendary founder, Kāsim Khān. Its history cannot be traced back beyond the seventeenth century; but even when first mentioned it appears as a place of great consequence. After Sātgaon had been ruined by the silting up of the Saraswatī mouth, and before Calcutta was founded, Cossimbazar was the great emporium.

An English commercial agent was first appointed to Cossimbazar in 1658; and nine years later it was decided that the Chief at this place should be also a member of Council. In 1686 the factory at Cossimbazar, in common with the other English factories in Bengal, was confiscated by order of the Nawāb Shaista Khān; but it was restored a year or two later, and at the close of the century had become the leading English commercial agency in Bengal. In 1681, when Job Charnock, the future founder of Calcutta, was Chief at Cossimbazar, of £230,000 sent out by the East India Company as the investment to Bengal, £140,000 was assigned to Cossimbazar. In 1763, out of a total of £400,000 required as advances for investment, Cossimbazar demanded £90,000, or as much as any other two agencies, excepting Calcutta, and the filatures and machinery of the Company were estimated to be worth 20 lakhs. According to native tradition, the town was so studded with lofty buildings that the streets never saw the rays of the sun.

The factory of the Company at Cossimbazar owed much of its wealth, and all its political importance, to its close neighbourhood to the Muhammadan capital at Murshidābād. But from the same cause it was liable to constant danger. It was a matter of common occurrence for the Nawāb to order out his troops to blockade the walled factory, whenever he had any quarrel with the English Council at Calcutta. In

1757, when the Nawāb Sirāj-ud-daula resolved to drive the English out of Bengal, Cossimbazar felt the first effects of his anger. The factory was taken without resistance, and the Englishmen, including Mr. Watts, the Resident, and Warren Hastings, his assistant, were sent in custody to Murshidābād. After the battle of Plassey, Cossimbazar regained its commercial importance; but the political power formerly held by the Resident was transferred to the English Agent at the court of the Nawāb, who lived at Murshidābād.

The decay of Cossimbazar dates from the beginning of the nineteenth century, when its climate, which had previously been celebrated for salubrity, underwent an unexplained change for the worse, so that the margin of cultivation receded and wild beasts increased. In 1811 Cossimbazar town is described as noted for its silk, hosiery, *koras*, and inimitable ivory work, while the surrounding country was 'a wilderness inhabited only by beasts of prey.' In 1813 the ruin of the town was effected by a change in the course of the Bhāgīrathi, which suddenly deserted its ancient bed and, instead of following its former bend to the east, took a sweep to the west; it now flows 3 miles from the site of the old town. The channel in front of the warehouses of Cossimbazar became a pestiferous marsh, a malarious fever broke out, and the place gradually became depopulated. The Company's filatures, however, continued to work, and weaving ceased only when it became impossible any longer to compete with the cheaper cotton goods of Manchester. In 1829 a census returned the population at 3,538. The town is the seat of the Mahārājā of Cossimbazar, a descendant of Kānta Bābu, banian of Warren Hastings. His palace is a fine building, portions of which were constructed of beautiful carved stone taken from the palace of Chet Singh, the Mahārājā of Benares. Apart from this, ruins of huge buildings and broad mounds of earth alone remain to attest the former grandeur of the place. The first wife ot Warren Hastings is buried here, and her tomb with its inscription is still in existence.

Cossipore-Chitpur (*Kāsīpur*).—Northern suburb of Calcutta, in the District of the Twenty-four Parganas, Bengal, situated in 22° 37′ N. and 88° 22′ E., on the left bank of the Hooghly river. Population (1901), 40,740, including 29,056 Hindus, 11,346 Musalmāns, and 338 Christians. Cossipore-Chitpur is a thriving industrial suburb, containing the Government Gun Foundry and Shell Factory, and a number of jute-presses, sugar and other factories. The town is within the jurisdiction of the Calcutta police. The municipality was separated in 1889 from the South Suburban municipality. The income during the decade ending 1901–2 averaged Rs. 1,36,000, and the expenditure Rs. 1,31,000. A reserve is being accumulated to carry out a drainage scheme which is under contemplation. In 1903–4 the income was

Rs. 1,58,000, including Rs. 70,000 derived from a tax on houses and lands, Rs. 25,000 from a conservancy rate, Rs. 28,000 from a water rate, Rs. 16,000 from jute warehouse fees, and Rs. 4,000 from a tax on vehicles. The incidence of taxation was Rs. 3-2-10 per head of the population. In the same year the expenditure was Rs. 1,65,000, the chief items being Rs. 13,000 spent on fire-engine establishment, Rs. 14,000 on lighting, Rs. 23,000 on water-supply, Rs. 7,000 on drainage, Rs. 54,000 on conservancy, Rs. 6,000 on medical relief, Rs. 16,000 on roads, and Rs. 2,000 on education. Filtered water is purchased from the Calcutta Corporation and distributed in the streets and by house connexions. The North Suburban is a large hospital, with 30 beds for men and 10 for women. The electric tramway from Calcutta has been extended to Belgāchia, where there is a Veterinary college.

Courtallum.—Village in Tinnevelly District, Madras. *See* KUTTĀLAM.

Covelong (*Kovalam*).—Village in the District and *tāluk* of Chingleput, Madras, situated in 12° 47′ N. and 80° 15′ E., on the east coast about 20 miles south of Madras City. Population (1901), 1,921. It was originally a Dutch settlement, and the Imperial East India Company of Ostend seems to have had a trading station here and to have built a fort. There are now no traces of either. The ruins at present in existence belong to the fort called Saādat Bandar, built by Anwar-ud-dīn Khān, Nawāb of the Carnatic from 1744 to 1749. In 1750 this was seized by stratagem by the French. A party of soldiers with arms concealed under their clothes and simulating extreme sickness were admitted into the fort by the kindly natives, who believed their tale that they were the scurvy-smitten crew of the ship which had just anchored off the coast, unable to proceed. During the night they rose and overpowered the garrison. In 1752 Clive invested the place and the French surrendered without firing a shot. The fortifications were then blown up. Covelong contains a Catholic church, an almshouse, and an orphanage founded and supported by a grant from the De Monte family, formerly rich merchants of Madras. At the present day the place depends almost entirely on the manufacture of salt. The pans lie to the west of the village, and are of large extent.

Cowcolly.—Village in Midnapore District, Bengal. *See* GEONKHĀLI.

Cox's Bāzār Subdivision.—Subdivision of Chittagong District, Eastern Bengal and Assam, lying between 20° 35′ and 21° 56′ N. and 91° 49′ and 92° 23′ E., with an area of 896 square miles. The subdivision comprises a long narrow strip of coast valleys and low ranges of hills, and the islands of Maiskhāl and Kutubdiā. The population in 1901 was 200,169, compared with 188,006 in 1891. The

subdivision is sparsely inhabited, the density being only 223 persons per square mile against 543 for the whole District. It contains one town, Cox's BĀZĀR (population, 3,845), the head-quarters; and 233 villages. Almost the whole subdivision is included in a Government estate. The only noteworthy place is SHĀHPURI ISLAND, the scene of the outbreak of 1823 which led to the commencement of the first Burmese War.

Cox's Bāzār Town.—Head-quarters of the subdivision of the same name in Chittagong District, Eastern Bengal and Assam, situated in 21° 27′ N. and 91° 59′ E. Population (1901), 3,845. The town is named after Lieutenant Cox, who in 1799 was appointed to supervise the Arakanese fugitives seeking shelter in British territory after the conquest of Arakan by the Burmans; two-thirds of the population are descendants of these refugees. Cox's Bāzār was constituted a municipality in 1869. The income during the decade ending 1901–2 averaged Rs. 5,000, and the expenditure Rs. 4,000. In 1903–4 the income was Rs. 5,300, mainly derived from a tax on persons (or property tax) and from tolls; and the expenditure was Rs. 5,000. The Arakanese weave silk *lungīs* or kilts, but the town is decadent, and the industry is languishing. The town contains the usual public offices; the sub-jail has accommodation for 20 prisoners.

Cuddalore Tāluk.—Head-quarters *tāluk* and subdivision of South Arcot District, Madras, lying between 11° 30′ and 11° 52′ N. and 79° 26′ and 79° 47′ E., on the coast of the Bay of Bengal. It is more thickly populated than any other, the density being 808 persons per square mile, compared with the District average of 450. The population in 1901 was 361,776, and 361,303 in 1891. It contains three towns—namely, the municipality of CUDDALORE (population, 52,216), the head-quarters of the *tāluk* and the District, PANRUTI (15,206), and NELLIKUPPAM (13,137)—and 224 villages. The demand for land revenue and cesses in 1903–4 amounted to Rs. 5,23,000. Large areas are planted with casuarina and fruit trees. The *tāluk* consists for the most part of a level alluvial plain of great fertility but few natural features. Diagonally across it, however, runs the plateau of Mount Capper, a high lateritic table-land, and here the rich alluvium gives place to a barren red soil in which little will grow.

Cuddalore Town.—Head-quarters of the *tāluk* of the same name and of the District of South Arcot, Madras, situated in 11° 46′ N. and 79° 46′ E., on the trunk road from Trichinopoly to Madras, 118 miles by road and 125 by rail south of Madras and 12 miles south of Pondicherry. It is made up of several different quarters, chief of which are Cuddalore New Town, consisting of Tirupāpuliyūr, noted for its ancient Siva temple, and Manjakuppam, containing the principal public offices and European bungalows picturesquely situated among fine trees on

the four sides of a large open plain; Devanāmpatnam, in which are the ruins of old FORT ST. DAVID; and Cuddalore Old Town, a seaport and the chief trading centre of the District. Two rivers, the Ponnaiyār and the Gadilam, pass through it to the sea; and the name of the town is supposed to be a corruption of Kūdal-ūr, meaning 'junction town,' or the place where the two rivers meet. These rivers are liable to heavy floods, and in 1884 they united and their waters swept through the town for twenty-four hours. The current tore across the plain round which the offices stand to a depth of 5 feet, and a youth narrowly escaped drowning close to the old time-gun there.

The population of Cuddalore in 1871 was 40,290; in 1881, 43,545; in 1891, 47,355; and in 1901, 52,216. It has thus increased steadily in size, and is now the eleventh largest town in the Presidency. Of the total in 1901, 47,833 were Hindus, and the remainder were about equally divided between Christians and Musalmāns. Cuddalore was constituted a municipality in 1866. The municipal area extends over 13 square miles, including 18 villages and hamlets. The receipts and expenditure during the ten years ending 1902–3 averaged Rs. 50,500 and Rs. 49,300 respectively. In 1903–4 the income was Rs. 59,000, chiefly derived from the house and land taxes (Rs. 16,600) and tolls (Rs. 13,600); and the expenditure was Rs. 57,500, including conservancy (Rs. 16,800), roads and buildings (Rs. 11,200), and the municipal hospital (which contains beds for 48 in-patients) and dispensaries (Rs. 10,400). Being the administrative head-quarters of the District, Cuddalore contains all the chief public offices and courts, a Protestant and a Roman Catholic church, the District jail, &c., besides the sea-customs and marine establishments. The Collector's residence is the old Garden House of the Governors of Fort St. David, which was the scene of some fierce fighting in the wars with the French. The port of Cuddalore is the largest in South Arcot. Coasting steamers call periodically, and foreign vessels also touch to load with ground-nuts, the chief export of the District. The total imports and exports in 1903–4 were valued at 20 lakhs and 137 lakhs respectively. An old-established European firm has an important branch office here, which is located in the building originally constructed for the East India Company's factory and afterwards used as the District jail; and other firms are being attracted by the ground-nut trade.

Cuddalore has a reputation for healthiness; and elephantiasis, which was at one time painfully frequent, is now disappearing from the Old Town, owing to the supply of filtered water from a reservoir near by. This supply is, however, brought down only to one part of the town and is limited in quantity. A more ambitious scheme has been prepared, but its cost (3·7 lakhs) is more than the municipality is able to afford at present. A dispensary for women and children, near the

railway station in New Town, built by Rājā Sir S. Rāmaswāmi Mudaliyār, is maintained from Local and municipal funds. *Kailis* and fabrics of silk mixed with cotton are the chief manufacture. On the outskirts of the town, on Mount Capper (the Bandapolam Hill of Orme), is the new District jail, which was constructed by convict labour and has accommodation for 406 prisoners. Considerable quantities of cotton goods, including carpets and towels, are manufactured by the convicts.

Cuddalore is the educational centre of the District, the chief institutions being St. Joseph's College, a French Roman Catholic establishment of the second grade possessing a boarding-house for native Christians; and the Cuddalore College, which is managed by a local committee and teaches up to the matriculation standard.

The history of Cuddalore dates as far back as 1682, when the Company opened negotiations with the Khān of GINGEE for permission to settle here. In 1684 a formal lease was obtained for the present port and the former fortress, of which no remains now exist. During the next ten years trade increased so rapidly that the Company erected Fort St. David for the protection of the place and rebuilt their warehouses. On the fall of Madras in 1746, the head-quarters of the Presidency were transferred to Fort St. David, where they remained till 1752.

Cuddapah District (written 'Kurpah' in the old records, which still survives as the trade-name of Madras indigo).—The south-easternmost of the CEDED DISTRICTS in the Madras Presidency, lying between 13° 27′ and 15° 14′ N. and 77° 51′ and 79° 29′ E., with an area of 8,723 square miles. *Kadapa* means a 'gate' in Telugu, and the name is said to be derived from the fact that Cuddapah town is the gate to the holy places at TIRUPATI. The District is bounded on the north by Kurnool, on the east by Nellore, on the south by North Arcot and Mysore territory, and on the west by Anantapur. It consists of two well-marked natural divisions. The four south-western *tāluks* form part of the Mysore plateau and stand at a greater elevation (1,500 to 2,250 feet) than the rest of the District. Separated by the Seshāchalam and Pālkonda Hills, the other *tāluks* lie at a lower level. The conditions of these two tracts differ widely. The upland *tāluks* are mainly composed of red, infertile soil, broken up by numberless groups of small rocky hills. Much of the low country is made up of a wide expanse of black cotton soil, backed by the brown line of the hills and dotted here and there with clumps of *babūl* trees and small rocky elevations, which are covered with verdure in the wet season and in their most sheltered nooks, but for much of the year are burnt up and arid. Except the Pālkonda range, which thus divides the District, the hills in Cuddapah

Physical aspects.

are usually too disconnected to have received any specific names or largely to affect the conformation of the country. The only exceptions are the spurs of the Nallamalais, which run down from Kurnool into the *tāluks* of Badvel and Proddatūr in the extreme north.

The whole of the District drains into one river, the Penner. This runs from west to east below the Pālkonda Hills through the low-country *tāluks*, and passes into Nellore District by the gap in the Eastern Ghāts at Somasila. Its chief tributaries in the lower *tāluks* of Cuddapah are the Sagileru, which flows through Badvel and Sidhout, and the Kunderu, which passes through Proddatūr. The four upland *tāluks* drain into three main streams—the Cheyyeru, the Pāpaghni, and the Chitrāvati—which eventually find their way through gaps in the Pālkonda Hills and join the Penner in the low country. Except the Cheyyeru, these streams have their original sources outside the District. The Chitrāvati rises near Nandidroog in the State of Mysore, and for most of its course runs through Anantapur District. It joins the Penner in the north-westernmost corner of Cuddapah District in the Jammalamadugu *tāluk*. The Pāpaghni ('sin-destroyer') also has its source in Mysore, runs across the upland part of Cuddapah nearly due north, flows through the large tank of Vyāsasamudram at Kandukūr, and thence through the Pālkonda Hills near Vempalle to join the Penner in the Cuddapah *tāluk*. The Kunderu rises in Kurnool, and drains the great cotton-soil plains which stretch between Nandyāl in that District and Proddatūr in Cuddapah. The Sagileru springs from the higher peaks of the Nallamalai Hills not far from Cumbum in Kurnool District, and in Cuddapah flows in a deep channel along a narrow valley. The Cheyyeru rises within Cuddapah District in the Vāyalpād *tāluk*, and after being fed by several small jungle streams, the principal of which is the Bāhudānadī, flows through the Pālkonda Hills and the rich valley which once formed the petty chiefship of Chitvel, and falls into the Penner not far from the eastern limit of the District. None of these streams is in any sense perennial. They are filled from the drainage of bare, rocky country devoid of heavy forests, and consequently become torrents for a few days and then as suddenly dwindle to thin trickles of water flowing through wide sandy beds. The gorge of the Penner at Gandikota and the narrow pass by which the Cheyyeru flows down to the low country are both famous for the beauty of their scenery.

Geologically, the District is of considerable interest. The rocks of the upland *tāluk* differ widely from those of the rest of the country. They are mainly Archaean granites and gneisses, and often, as at Horsleykonda and among the hills west of Madanapalle, run up into masses of much boldness and beauty. Crossing them are three narrow bands of the younger Dhārwar series, all running nearly due south;

and intruded through them are an extraordinary number of dioritic trap dikes, which form a striking network of black ridges, devoid of all vegetation, seaming the face of the country in every direction. The low country in the north-west of the District, below the Pālkonda Hills, is occupied by much younger azoic sedimentary rocks belonging to the Cuddapah and Kurnool series. The base of the Cuddapah system occurs along the southern edge of the Pālkonda Hills. Here in one spot is exposed a great thickness of quartzites, called the Guvalcheruvu quartzites, forming a fine scarp over 30 miles long. These are overlaid by a series of slaty beds, known as the Vempalle slates, which in their turn are covered by the Nagari quartzites and the great Pullampet slate series. More quartzites cap the Pālkonda Hills as they run southward out of the District, forming the picturesque red scarp which overlooks the upland *tāluks*; and yet others crown the section of the Eastern Ghāts, sometimes called the Velikonda hills, which limits the District on the east. The rocks of the Kurnool system, which rest upon and cover up the Cuddapah rocks in the valley of the Kunderu, consist of limestones and overlying shales of the Jammalamadugu group of the system. The limestones are of the Narji series, and are fine grained and compact. The proximity of the Narji quarries to the railway has led to their being widely employed for a variety of purposes, under the name of 'Cuddapah slabs.'

The flora of the District is not peculiar or distinctive. In the upward *tāluks* it consists largely of drought-resisting plants such as cactus, Euphorbias, and Asclepiads; and the most noticeable trees are perhaps the date-palms which fringe all the hollows, and the tamarinds which always do well on granite soil. In the low country the flora resembles that of the other black cotton-soil areas, and the commonest tree is the *babūl* (*Acacia arabica*). The chief trees on the hills are referred to below in the account of the Forests.

A few tigers, *sāmbar*, and spotted deer are found in the heavier forests, as also wild hog and an occasional *nīlgai*. The boulder-strewn hills of the upland *tāluks* afford admirable dwelling-places for bears and leopards. On the plains are antelope, *chinkāra* (Bennett's gazelle), wolves, and hyenas. Peafowl and jungle-fowl are not rare, and quail abound, but snipe are less common.

The climate differs greatly in the two natural divisions of which the District consists. The malaria of the basin in which CUDDAPAH TOWN lies is most virulent, and has on more than one occasion led to proposals to move the head-quarters of the District to some other station. Fever also occurs along the foot of and among the various hills, and in the Kadiri *tāluk*. But most of the upland part of the District is exceptionally healthy and bracing. The temperature here resembles that of the Mysore plateau, being warm for three months but pleasant

poligār on the Kurnool frontier of the District, dissatisfied with the small pension he received, attempted to raise a general rebellion and assembled some thousands of men. He was, however, captured by a British detachment and publicly hanged.

The most interesting antiquities in the District are perhaps the forts at GURRAMKONDA and GANDIKOTA. Prehistoric stone implements occur in large quantities along the valley of the Penner. There are dolmens in a few places. Some old Hindu coins and an *aureus* of Trajan have been discovered. The most noteworthy Hindu temples are those at Sompalle and Kadiri.

Population.

The number of towns and villages in the District is 1,247. The population in 1871 was 1,351,194; in 1881, 1,121,038; in 1891, 1,272,072; and in 1901, 1,291,267. The decline in 1881 was due to the great famine of 1876-8. Owing to the three bad seasons which occurred during the decade ending 1901, the increase in that period was extremely small; and by the end of it the District had failed to recover the population lost twenty-five years before. Cuddapah is divided into the eleven *tāluks* of BADVEL, CUDDAPAH, JAMMALAMADUGU, KADIRI, MADANAPALLE, PRODDATŪR, PULIVENDLA, PULLAMPET, RĀYACHOTI, SIDHOUT, and VĀYALPĀD. Statistics of population, based on the Census of 1901, are given in the following table:—

Tahsil.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of perons able to read and write.
		Towns.	Villages.				
Jammalamadugu	616	1	129	103,707	168	+ 2·4	5,168
Proddatūr . .	478	1	86	102,570	215	+ 4·2	4,181
Pulivendla .	701	1	101	103,396	147	− 2·3	4,646
Sidhout . .	606	...	79	68,087	112	+ 1·9	2,819
Badvel . .	755	2	111	89,361	118	− 4·1	4,306
Pullampet . .	979	1	127	143,521	147	− 3·7	6,213
Cuddapah . .	764	1	152	155,541	204	+ 0·4	8,920
Madanapalle .	837	1	99	136,977	164	+ 7·6	5,426
Kadiri . .	1,158	1	139	145,503	126	+ 7·8	4,395
Rāyachoti . .	998	1	89	113,912	114	+ 0·6	4,936
Vāyalpād . .	831	...	125	128,692	155	+ 1·3	4,661
District total	8,723	10	1,237	1,291,267	148	+ 1·5	55,671

The head-quarters of the *tāluks* (except that of Pullampet, which is at Rāzampeta) are at the places from which each is named. The chief towns are the municipality of CUDDAPAH, the administrative head-quarters of the District, and MADANAPALLE, the head-quarters of a divisional officer.

Cuddapah is larger than Wales, and ranks third in area among the Districts of the Presidency; but the density of the population,

like that of all the Deccan Districts, is low, only two *tāluks* having as many as 200 persons to the square mile. Almost all the people speak Telugu, which is the prevailing language in every *tāluk*, the only other vernacular of importance being Hindustāni, which is spoken by about 8 per cent. of the population. Like the other Deccan Districts, Cuddapah presents a curious deficiency in the number of females, who are much outnumbered by the males. Of the total population, 1,142,454 are Hindus and 129,537 Musalmāns. The latter bear a higher proportion (10 per cent.) to the total than is usual outside the Deccan.

Except the wandering tribe of the Yerukalas, who are more numerous here than in any other Madras District, the great majority of the Hindus are Telugus by race, though they include a sprinkling of Tamils from the south. The two most numerous castes are the cultivating Kāpus or Reddis (300,000), and the trader and agriculturist Balijās (119,000); while among communities which, though not numerically remarkable, are found in greater strength in Cuddapah than elsewhere in the Presidency, may be mentioned the Besthas, who live by cultivation and fishing in tanks, the Patras, who are *shikāris* and agriculturists, and the Togata weavers. Brāhmans are few, numbering only 18 in every 1,000 of the Hindu population. A majority of the Musalmāns returned themselves as Shaikhs, but the Dūdekulas—a race sprung from intermarriage between Musalmāns and Hindu women—are exceptionally numerous. Pathāns and Saiyids are also more numerous than elsewhere.

By occupation the people are even more exclusively agricultural than usual, 71 per cent. subsisting by the land, and a further 3 per cent. by the tending and rearing of cattle, sheep, and goats. Weavers are also proportionately numerous. Persons subsisting by the various professions are, on the other hand, comparatively few.

Of the 18,800 native Christians in the District, nearly 18,000 are Protestants. The Jesuit missionaries were the first to begin operations, but their work does not apparently date from farther back than the early part of the eighteenth century. Their chief station was Krishnapuram. The Christians there were constantly harassed by the persecutions of Tipū, which resulted in the eventual dispersion of the congregation. Later, another station was established at Satyapuram in the Proddatūr *tāluk*. The subversion of the Jesuits had the usual disastrous effect on these missions. From the beginning of the last century up to 1842 they were in charge of the Pondicherry Mission, and in 1843 they were transferred to the Vicar Apostolic of Madras. There are at present only 600 Roman Catholics in the District. Of the Protestant missions the chief are the London Mission, the American Arcot Mission, and the Society for the Propagation of the Gospel. The

first of these originally began work in 1822 in Cuddapah town, and has gradually extended its operations into the Proddatūr, Jammalamadugu, Pulivendla, Sidhout, and Kadri *tāluks*. The second has been established in the Madanapalle and Vāyalpād *tāluks* since 1886; and the last, which started forty years after the London Mission, is working in Badvel and Jammalamadugu.

Agriculture.

Agricultural practice differs with the varying characteristics of the several parts of the District. The four upland *tāluks* undulate so continuously that it would be difficult to find in them a single square mile of perfectly level ground. The soil is thin and poor, but in the numerous villages lie narrow strips where the soil washed down from above is of better quality. These are often protected by chains of small tanks or artificial reservoirs. The three eastern *tāluks* contain belts of alluvium along the banks of the rivers which traverse them, and throughout these the underground supply of water is good and wells are numerous. Much of the four northern *tāluks* consists of a plain of black cotton soil; but in the Cuddapah *tāluk* wide stretches have been rendered useless by the salts and alkalies with which they are impregnated. In each of these several tracts the agricultural practice differs. The poorer soils are sown after light showers, the cotton soil when it has been thoroughly soaked, and the irrigated land only when the tanks have received their supplies. Generally speaking, the most important sowing season for both 'dry' and 'wet' land is from August to October: that is to say, by the middle of October nearly three-fourths of the 'dry' land and nearly half of the 'wet' land should have been sown.

The District is composed entirely of *ryotwāri* and *inām* lands, and contains no *zamīndāris*. The area shown in accounts is 8,710 square miles, distributed as follows in 1903-4:—

Tāluk.	Area shown in accounts.	Forests.	Cultivable waste.	Cultivated.	Irrigated.
Jammalamadugu	612	58	16	349	22
Proddatūr . .	478	102	29	276	36
Pulivendla . .	701	107	51	335	31
Sidhout . .	606	335	10	83	32
Badvel . .	742	283	83	206	41
Pullampet . .	978	423	62	213	69
Cuddapah . .	764	194	76	354	82
Madanapalle .	838	151	51	332	43
Kadiri . .	1,160	218	112	488	35
Rāyachoti . .	999	306	74	286	35
Vāyalpād . .	832	183	84	270	44
Total	8,710	2,360	648	3,192	470

It will be seen that 27 per cent. of the District is covered with forests and a further 29 per cent. is not available for cultivation, while only

37 per cent. is cultivated. The staple food-grains are *cholam* (*Sorghum vulgare*), *cambu* (*Pennisetum typhoideum*), and *rāgi* (*Eleusine coracana*), the areas under which in 1903–4 were 456, 586, and 189 square miles respectively, or 16, 20, and 6 per cent. of the total area cropped. *Cholam* is the most prominent crop in the cotton-soil tracts in Pulivendla, Jammalamadugu, Cuddapah, and Proddatūr; and *cambu* on the red soils in Rāyachoti, Kadiri, Vāyalpād, and Madanapalle. Rice occupied 352 square miles. Next in importance come various pulses. Cotton is grown mainly in Jammalamadugu, Proddatūr, and Pulivendla; indigo in Pulivendla and Cuddapah; and castor in Kadiri, Madanapalle, and Rāyachoti. Half of the area cultivated with horse-gram (the crop of the poor soils) is in the Kadiri *tāluk*. Tobacco is raised in small areas all over the District; sugar-cane chiefly in the upland *tāluks*; and melons chiefly in Sidhout and to some extent in Cuddapah.

The total extent of holdings during the five years preceding the famine of 1876–8 averaged 1,305,000 acres. By 1903–4 this had increased to 1,340,000 acres, or by only 2·7 per cent. The famine of 1876 did immense harm to the country, which has hardly yet recovered. Little has been effected towards the improvement of the quality of the crops grown. The ryots have, however, availed themselves largely of the Land Improvement Loans Act. Between 1888 and 1904 more than 7½ lakhs was advanced under this enactment, the greater portion of which has been laid out in digging or repairing wells.

Cattle and sheep are bred in a casual fashion in many parts of the District. The best cattle are, however, imported from Nellore and Mysore by travelling drovers, who sell them to the ryots on the instalment system. Sheep are of two breeds, the Kurumba and the Semmeri. The former are black-faced sheep carrying white wool, which is woven into coarse blankets by the Kuruba caste. The latter are brown and covered with hair instead of wool, and are valued only for their flesh and their manure.

Of the total area of *ryotwāri* and 'minor *inām*' lands cultivated, 470 square miles, or 15 per cent., were irrigated in 1903–4. Of this amount only 15 per cent. was supplied from canals, while 40 per cent. was watered from wells and 39 per cent. from tanks.

There are only two works in the District, the KURNOOL-CUDDAPAH CANAL and the Sagileru project, which are sufficiently important to have separate capital and revenue accounts kept for them. The area irrigated by the former varies greatly with the season, the ryots taking little water except in bad years. In 1903–4 it supplied 20,000 acres. The Sagileru project, which irrigated 7,000 acres in the same year, consists of a dam across the river of that name and a channel that feeds ten tanks. The Chapād and the Vemula tank projects are two addi-

tional schemes which are under construction. The great Tungabhadra project, now under investigation, would increase the supply in the Penner river and benefit the land commanded by it.

Of the 4,361 tanks in the District the chief are those in Badvel, Porumāmilla, Kandukūr, and Peddatippasamudram (Madanapalle *tāluk*). In the upland *tāluks* there are a great number of small tanks, the area supplied by each of which is often less than an acre.

Wells are in many parts the chief support of the ryot in times of deficient rainfall. There are 47,000 of them in working order. The average area irrigated by each well ranges, according to the nature of the soil, from about 1½ acres in Madanapalle, Vāyalpād, and Rāyachoti to 5 acres in Jammalamadugu and Pullampet. Leathern buckets drawn up with a rope and pulley by cattle working down an inclined plane are universally used for lifting water. The Cuddapah ryot does not back the animals up the ramp between each bucketful as in some other Districts. He detaches them and lets them walk round to the top, where they are again fastened to the rope to raise the next bucket.

Forests.

The forests of the District cover 2,360 square miles, or 27 per cent. of the area for which particulars are available. They are confined almost entirely to the hills, hardly any being found on the low ground; the largest continuous areas are on the Pālkonda Hills in the Pullampet, Rāyachoti, and Sidhout *tāluks*, and on the Nallamalais. The extent and value of the forests has recently led to their being subdivided into the three charges of South, North, and West Cuddapah, each under a District Forest officer with head-quarters at Cuddapah town.

At present the growth in them consists mainly of coppice shoots. The annual rainfall is insufficient for the production of large timber, the forests are heavily grazed by licensed cattle, and fires are of frequent occurrence in the hot season, when the whole country is as dry as tinder. The most important trees are *Anogeissus latifolia*, the uncommon red-sanders (*Pterocarpus santalinus*), *yepi* (*Hardwickia binata*), a graceful, birch-like tree which produces perhaps the hardest and heaviest timber in India, *Terminalia tomentosa*, *Shorea Talura*, and some teak and satin-wood (*Chloroxylon Swietenia*).

Honey and wax and other minor products are collected by the Yānādis, a wild jungle race, who will climb in search of them into apparently inaccessible places.

Metallic minerals are scarce in Cuddapah. Some iron ores exist in the Nallamalais and elsewhere, but they are not now worked. The argentiferous galena of Jangamrāzupalle and Vonipenta has attracted attention. Extensive old workings for it occur in villages to the north of the road from Cuddapah to Badvel. Some shingle beds in the

valley of the Penner east of Chennūr and 4 or 5 miles north of Cuddapah town were worked for diamonds by washing between 1860 and 1870, but the results were not encouraging.

Good building stone is common all over the District. Granite, limestone, slate, and sandstone are quarried in considerable quantities in different places, and laterite is found in appreciable amounts in the Cuddapah *tāluk*. The 'Cuddapah slabs' have already been referred to.

Trade and communications.

There are no industries of importance. Cotton-weaving is of the ordinary kind, only coarse cloths being made. In the Jammalamadugu *tāluk* turbans of a coarse kind and carpets are woven, which are sent to the Central Provinces for sale. Pullampet has a reputation for its lace cloths, which are sent to Madras and other places. At Proddatūr two cotton-presses work during the cotton harvest. There are nearly 2,000 indigo-vats, two sugar-mills, and four small tanneries.

Cuddapah has no particular trade. It exports what little surplus agricultural products it raises, and imports in return the necessaries of life which are not produced locally. The chief exports are pulses, horse-gram, castor seed, *cholam*, cumin seed, indigo, turmeric, jaggery (coarse sugar), tamarind, *pishānam* rice, and cotton; while the chief imports are salt, European piece-goods and metal ware, gingelly oil, coco-nuts, and kerosene oil. Cumin seed is sent to all the southern parts of the Presidency, and cotton chiefly to Madras. Proddatūr, Jammalamadugu, Vāyalpād, and Pullampet are the centres of general trade, and the principal trading caste is the Komatis. The Mārwāris, who are foreigners, do some of the trade of the upland *tāluks*. Most of the internal commerce is carried on at weekly markets. Some of these are under the control of the local boards, and in 1903–4 more than Rs. 7,500 was collected in market fees. The most important are those at Pulivendla, Pileru, Madanapalle, Burakoilkota, and Proddatūr.

The north-west line of the Madras Railway (standard gauge) enters the District at Peddapādu in its south-east corner, and runs diagonally across it to the north-west corner, passing by Cuddapah town. It was opened in 1864–6. The South Indian Railway (metre gauge) enters the District near Pileru on the southern frontier, and runs in a north-westerly direction to join the Southern Mahratta Railway at Dharmavaram in Anantapur District. It was opened in 1892. A branch from this to Rāyachoti, which has been surveyed, would protect an area very liable to famine. The total length of metalled roads is 642 miles, and of unmetalled roads 662 miles, maintained from Local funds. There are avenues of trees along 953 miles. Roads are fairly numerous in the eastern and northern sections of the District,

where, however, the loose nature of the soil makes them expensive to maintain; and in the southern portion, on the harder red soils, they are plentiful. The section of the Kurnool-Cuddapah Canal in the Proddatūr and Cuddapah *tāluks* is open for navigation for a part of the year.

The greater part of the District lies within the famine zone of the Presidency, the only *tāluks* not distinctly included in it being those which form the eastern section. It has suffered repeatedly from bad seasons. Between 1800 and 1802, considerable distress prevailed, and relief works were opened. Other scarcities occurred in 1805–7, 1824, and 1833. In 1866 very high prices obtained. The worst season ever known was the great famine of 1876–8. At the height of this, in September, 1877, there were 139,000 persons on relief works, besides 157,000 in receipt of gratuitous relief. Together, these made up no less than 22 per cent. of the total population. The Census of 1881 showed a decrease of 230,156, or 17 per cent., as compared with the Census of 1871. This loss was due to the famine. Including advances to agriculturists and weavers and remissions of land revenue, the distress in this District alone cost the state at least 70 lakhs. In 1891–2 there was again severe scarcity. In May, 1892, more than 12,000 persons were on relief. Including remissions of assessment and advances to agriculturists, the cost was 12¼ lakhs. Scarcity once more appeared in 1896–7, owing to deficient rainfall. At the height of the famine, in July, 1897, 123,100 persons were being relieved—106,400 on works, and 16,700 gratuitously. The cost to the state, including the sums lent to agriculturists and remissions of land and other revenue, was about 21½ lakhs. The last scarcity, in 1900–1, was less severe. The largest number on relief works was 4,100 (in August, 1901), and the number fed at kitchens was 1,400 in the following month. The total expenditure was 5½ lakhs, including about Rs. 20,800 received from the Indian Famine Charitable Relief Fund. Weavers were helped by granting them advances to be repaid in woven cloth. These advances amounted to Rs. 93,500, and Rs. 85,000 was recovered by the sale of the cloth.

Famine.

For administrative purposes the District is distributed into four subdivisions, one of which is usually in charge of a member of the Indian Civil Service, while the others are under Deputy-Collectors recruited in India. These subdivisions are: Madanapalle, comprising the four upland *tāluks* of Rāyachoti, Kadiri, Vāyalpād, and Madanapalle; Jammalamadugu, comprising Proddatūr, Jammalamadugu, and Pulivendla in the north-west corner; Sidhout, comprising Badvel, Sidhout, and Pullampet on the eastern frontier; and Cuddapah, which consists of the single *tāluk* of that name. There is a *tahsīldār* at the head-quarters of each *tāluk*, and (except at

Administration.

Vāyalpād, Sidhout, and Badvel) a stationary sub-magistrate also. Deputy-*tahsīldārs* are stationed at Pileru, Chitvel, Kamalāpuram, and Cuddapah. The superior staff of the District consists of the usual officers, except that, as already mentioned, there are three Forest officers. The head-quarters of the Executive Engineer are at Madanapalle.

Civil justice is administered by a District Judge and four regular District Munsifs. The Court of Sessions at Cuddapah hears the serious criminal cases. Murders are more than usually common, being mostly due to spite or jealousy. Dacoities increase, as elsewhere, in times of scarcity. In many villages there are rival parties, one faction being led by the village headman and the other by some other influential person. This state of things frequently gives rise to rioting, murder, and other offences. Crime has become less frequent since the provisions of the Criminal Procedure Code, which enable security to be demanded from suspicious characters, have been rigorously enforced.

Little is known of the revenue history of the District previous to its occupation by the British. Munro's first settlement is the earliest matter on which there is accurate information. Owing to the fact that he took charge towards the end of 1800, he had time that year to conduct only a hasty settlement with the village as the unit. This was based on the *kāmil* assessment made by the Muhammadan government, the assessment of 1788–9 under Tipū Sultān, and that of 1799–1800 under the Nizām. The revenue received was only about 12 lakhs, compared with 23 lakhs raised by the Musalmāns. The next year (1801–2) Munro introduced a *ryotwāri* settlement. He also began a new survey and settlement, which was completed in five years. At the end of that time (1807) the revenue amounted to 17 lakhs, but in the following year it rose to 22 lakhs, and in the succeeding year to over 23 lakhs. Munro took leave in 1807. The next year the villages were rented out as small farms for a term of three years, the step being preparatory to a permanent lease. This plan was not at all successful, and a longer lease, for ten years, was inaugurated in 1811. The nominal revenue of the District during this lease was higher than it had ever been, but few of the renters were able to pay their dues. The system was a complete failure, and on the expiration of the lease in 1821 the *ryotwāri* system introduced by Munro was reverted to. Reductions in Munro's rates of assessment, amounting to 25 per cent. in the case of 'dry' land, and 33 per cent. on 'wet' and garden land, were sanctioned at the same time. The immediate result of this was a fall in the revenue to about 15 lakhs. But thenceforward the receipts began steadily to rise, and the revenue in 1830 was nearly 20 lakhs. About 1866, a new survey of the District was begun, and a new settlement was put in hand in 1874 and completed

in 1883. The survey found an excess in the cultivated area of 8 per cent. over the area shown in the revenue accounts, and the settlement enhanced the total revenue by Rs. 1,08,000, or 7 per cent. The average assessment on 'dry' land is now R. 0-7-3 per acre (maximum Rs. 5, minimum 4 annas), and on 'wet' land Rs. 4-9-6 (maximum Rs. 10, minimum Rs. 2). The survey and settlement are now about to be revised.

The revenue from land and the total revenue in recent years are given below, in thousands of rupees:—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	21,44	21,36	20,92	25,20
Total revenue . .	26,16	29 47	28,39	33,18

Outside the municipality of Cuddapah, local affairs are managed by the District board and the four *tāluk* boards of Sidhout, Madanapalle, Cuddapah, and Proddatūr, the areas of which correspond with the four administrative subdivisions above mentioned, the Proddatūr *tāluk* board controlling matters in the Jammalamadugu subdivision. The total expenditure of these bodies in 1903-4 was about 3 lakhs, of which nearly a lakh was laid out on roads and buildings. The chief source of their income is, as usual, the land cess. In addition, the affairs of seventeen of the smaller towns are managed by Union *panchāyats* established under Madras Act V of 1884.

The Superintendent of police at Cuddapah has general control over the force within the District. There are 90 police stations; and in 1904 the force numbered 1,040 constables (including 111 head constables) and 515 *ghāt talaiyāris*, working under 20 inspectors, besides 1,094 village *talaiyāris*, or rural police. The *ghāt talaiyāris* are special watchers stationed at the more desolate parts of the main roads to protect travellers from dacoits.

The District jail at Cuddapah was closed in 1895, owing to the unhealthiness of the town. Convicts sentenced to periods of imprisonment exceeding one month are now sent to Vellore, Bellary, or Nellore. A portion of the old jail is, however, used as a subsidiary jail for persons under trial, prisoners sentenced to thirty days and under, and convicts *en route* to Vellore, &c. There are also 13 other sub-jails, which can collectively accommodate 265 males and 110 females, at the stations of the ten *tahsīldārs* and the three deputy-*tahsīldārs*.

Educationally, Cuddapah is backward. It ranks eighteenth among the twenty-two Districts of the Presidency in the literacy of its population, of whom only 4·3 per cent. (8·1 males and 0·4 females) are able to read and write. The Cuddapah and Madanapalle *tāluks* are the least illiterate. The total number of pupils under instruction in

1880–1 was 6,701; in 1890–1, 14,329; in 1900–1, 19,856; and in 1903–4, 21,590. The improvement during the last twenty-three years has thus been great. On March 31, 1904, there were in the District 985 educational institutions, of which 906 were classed as public and 79 as private. Of the former, 6 were managed by the Educational department, 92 by the local boards, and 6 by the Cuddapah municipality; while 347 were aided from public funds, and 455 were unaided but conformed to the rules of the department. They comprised 891 primary, 14 secondary schools, and one training school. The girls in them numbered 2,499. The District possesses no Arts college. The very great majority of the pupils under instruction are in primary classes. Of the male population of school-going age 17·6 per cent. were in the primary stage in 1903–4, and of the female population of the same age 2·6 per cent. Among Musalmāns (who, however, form a comparatively small proportion of the population) the corresponding percentages were 35·0 and 5·1. About 650 Panchama pupils were under instruction at 188 schools especially maintained for depressed castes. The two high schools are the municipal high school at Cuddapah and the native school at Madanapalle. The total expenditure on education in 1903–4 was Rs. 1,25,000, of which Rs. 49,000 was derived from fees. Of the total, 82 per cent. was devoted to primary schools.

The District possesses 3 hospitals and 9 dispensaries, which contain accommodation for 98 in-patients. In 1903 the number of cases treated was 105,000, of whom 1,100 were in-patients, and 2,850 operations were performed. The expenditure was Rs. 26,200, the greater part of which was met from Local and municipal funds. The hospitals at Madanapalle and Cuddapah possess endowments from public subcription; and there is an excellent mission hospital at Jammalamadugu.

In regard to vaccination the District has generally been backward. In 1903–4 the number of persons successfully vaccinated was only 24·6 per 1,000 of the population, or far less than the mean for the Presidency (30). Vaccination is compulsory in the municipality of Cuddapah and in twelve of the seventeen Unions.

[For further information regarding the District see the *Cuddapah District Manual*, by J. D. B. Gribble (1875).]

Cuddapah Tāluk.—Subdivision and *tāluk* in the District of the same name, Madras, lying between 14° 17′ and 14° 43′ N. and 78° 21′ and 78° 55′ E., with an area of 764 square miles. It is bounded on the south and east by the Pālkonda Hills, and on the north partly by the Lankamalla range. The population in 1901 was 155,541, compared with 154,899 in 1891; and the density was 204 persons per square mile, the District average being 148. The annual rainfall is 32 inches, compared with the District average of 28 inches. It con-

tains one town, CUDDAPAH (population, 16,432), the head-quarters of the *tāluk* and District; and 152 villages. The demand for land revenue and cesses in 1903–4 amounted to Rs. 3,13,000. The Cuddapah valley, in which the town lies, is a basin completely shut in by hills on three sides, and is excessively hot and notoriously malarious. The Penner traverses the *tāluk* from west to east, and receives within its limits three subsidiary streams: the Kunderu from the north, which joins it near Kamalāpuram; the Pāpaghni from the south, which runs into it below the same town; and the Buggeru, which after having received several affluents, flows into it close by the town of Cuddapah. The *tāluk* lies beyond the limit of black cotton soil which covers the western side of the District, and its soil is for the most part alluvial, overlying beds of argillaceous slates. This is by no means good generally, and is often rendered quite worthless by the presence of saltpetre, common salt, and soda, all of which occur as efflorescences. Agricultural practice is decidedly better than in other parts of the District. The methods are not much more elaborate than elsewhere, nor the implements much more perfect; but manuring and the rotation of crops are better understood, and the situation in the vicinity of centres of population and of commercial activity strengthens the hands of the ryot by increasing the demand for his produce and by rendering money available at moderate rates. The *tāluk* is fortunate in its water-supply, but the floods in the Penner might be more utilized.

Cuddapah Town.—Head-quarters of the District and *tāluk* of the same name in Madras, situated in 14° 29′ N. and 78° 50′ E., 507 feet above the level of the sea, 161 miles from Madras City by rail. Population (1901), 16,432, of whom half are Muhammadans who have, as a class, a reputation for illiteracy and religious intolerance. The name is sometimes derived from the Sanskrit *kripa*, 'mercy'; but others connect it with *kadapa*, meaning in Telugu a 'gate,' since the place is in some sense the gate from the north to the sacred town of TIRUPATI. During the Musalmān occupation it went by the name of Neknāmābād, after its supposed founder, Neknām Khān. It lies a few miles from the south bank of the Penner, and being enclosed on three sides by rocky hills is one of the hottest places in the Presidency, the average maximum temperature from March to June being over 100°. It also has a very bad name for malaria, and proposals have more than once been made to transfer the District head-quarters elsewhere. The Executive Engineer has been moved to Madanapalle, and the London Mission and the Madras Railway have also changed their head-quarters in the District to more healthy stations. The native town is surrounded by irrigated land, and the houses in it are squalidly built (generally of mud), badly constructed, and without free ventilation. The introduction of a supply of drinking-water from the Buggeru has

probably to some extent lessened its unhealthiness. It has been proposed to prohibit 'wet' cultivation in the immediate neighbourhood. A drainage scheme estimated to cost 5 lakhs is under consideration, and the preliminary cutting of a channel through the town to remove the surplus subsoil water which stagnates below has been sanctioned. The present town seems to be comparatively modern. It is probable that one of the lieutenants of the Golconda army erected the fort about 1570; but it is not till the beginning of the eighteenth century, when the Pathān Nawāb of Cuddapah had absorbed the whole of the neighbouring tracts except Gooty, and had extended his conquests to the Bāramahāl, that Cuddapah appears as the capital of a separate principality. The ultimate fate of its Nawābs is referred to in the account of the history of the District. The country was ceded to the Company by the Nizām in 1800, and the town was made the head-quarters of the District in 1817, and was a military cantonment until 1868. It was constituted a municipality in 1866. The municipal income and expenditure during the ten years ending 1902–3 averaged Rs. 46,000. In 1903–4 the income was Rs. 56,000, mostly derived from the taxes on houses and lands and tolls; and the expenditure was Rs. 49,000. The chief buildings are the Collector's office, erected in stone in 1889 at a cost of 2½ lakhs; Christ Church, designed by Mr. Chisholm, the late Government architect, and one of the prettiest of the Madras country churches; and the Collector's residence, a more than usually commodious building.

Culna.—Subdivision and town in Burdwān District, Bengal. *See* KALNA.

Cumbum Tāluk.—Easternmost *tāluk* of Kurnool District, Madras, lying between 15° 10′ and 15° 52′ N. and 78° 45′ and 79° 19′ E., with an area of 1,061 square miles. The population in 1901 was 115,881, compared with 117,602 in 1891, the density being only 109 persons per square mile. The *tāluk* contains one town, CUMBUM (population, 6,502), formerly the head-quarters; and 101 villages, of which as many as 27 are 'whole *ināms*.' The demand for land revenue and cesses in 1903–4 amounted to Rs. 1,99,000. The greater part of the *tāluk* is hilly, being shut in between the Velikondas (a section of the Eastern Ghāts) on the east and the Nallamalais on the west. Several low hills intersect the middle; and down the valleys formed by these flow the chief rivers, the Gundlakamma, Jampaleru, and Sagileru, the first two of which drain the northern portion, while the third flows through the southern part and ultimately falls into the Penner in Cuddapah District. The scenery of these valleys is fine, especially around the Pullalacheruvu waterfall. The way in which the rivers often run in deep gorges between hills affords admirable facilities for the formation of tanks by throwing dams across them. The most

noteworthy instance is the magnificent Cumbum tank, formed by an embankment built across the Gundlakamma river. The formation of the country is also favourable to the digging of wells. The prevailing soil is red and gravelly. The climate is generally unhealthy, and malarial fever is very prevalent in Cumbum town. The annual rainfall averages 25 inches. More than half the *tāluk* is covered with 'reserved' forests (599 square miles), which afford excellent pasture for cattle and sheep. It is poorly off for road communications, the western and northern portions being practically inaccessible during the rains.

Cumbum Town.—Town in the *tāluk* of the same name in Kurnool District, Madras, situated in 15° 35′ N. and 79° 6′ E. Population (1901), 6,502. Formerly it was the head-quarters of a Head Assistant Collector and *tahsīldār*, and a regiment was stationed here. Though built upon a sandstone rock and favourably situated for drainage, the town has a bad name for unhealthiness, which is mainly due to the use of bad drinking-water. With the idea of improving the sanitation of the town, it was constituted a municipality in 1866; but eventually the municipality was abolished and the Government offices transferred elsewhere. It is now a Union under the Madras Local Boards Act V of 1884. It possesses a hospital and the chief market in the District east of the Nallamalais, which is visited by traders from Guntūr, Palnād, Ongole, &c. Brightly coloured carpets of fast dyes, possessing a local reputation, are manufactured here on a small scale. By far the most noteworthy feature of the town is, however, the magnificent tank formed by damming a gorge through which flows the Gundlakamma river. The height of the dam is 57 feet. The traditional belief is that the tank was built by the sage Jamadagni; it is also said to have been constructed, or considerably improved, by the Gajapatis of Kalinga in the fifteenth century, and to have been restored later by the Vijayanagar princess Varadarājamma. It has a drainage area of 430 square miles and a capacity of 3,696 million cubic feet. The area irrigated by it in 1903-4 was 5,500 acres of first crop and 4,800 acres of second crop, or 10,300 acres in all. The revenue derived was Rs. 42,300.

Cutch (*Kachchh*, or 'The sea-coast land').—Native State under the political superintendence of the Government of Bombay, bounded on the north and north-west by the province of Sind, on the east by Native States under the Pālanpur Agency, on the south by the peninsula of Kāthiāwār and the Gulf of Cutch, and on the south-west by the Indian Ocean. Its limits, exclusive of a portion of the great salt marsh termed the RANN, extend from 22° 47′ to 24° N. and from 68° 25′ to 71° 11′ E., comprising a belt of land 160 miles from east to west and about 35 to 70 miles from north to south. The area of the State (exclusive

of the Rann) is 7,616 square miles, and it contains 8 towns and 937 villages. The capital is BHŪJ, where the chief or Mahārao resides. From its isolated position, the special character of its people, their peculiar dialect, and their strong feeling of personal loyalty to their ruler, the peninsula of Cutch has more of the elements of a distinct nationality than any other of the dependencies of Bombay.

Physical aspects.

The whole territory of Cutch is almost entirely cut off from the continent of India—north by the Great Rann, east by the Little Rann, south by the Gulf of Cutch, and west by the Arabian Sea. Though on the whole treeless, barren, and rocky, the aspect of the country is varied by ranges of hills and isolated peaks, by rugged and deeply cut river-beds, and by well-tilled valleys and tracts of rich pasture land. On the south, behind a high bank of sand that lines the sea-coast, lies a low, fertile, and well-cultivated plain from 20 to 30 miles broad. Beyond this plain, the country is broken by three hill ranges, those of Cutch proper, of Vāgad in the east, and the Rann islands in the north. The hills of Cutch proper spread widely in the west, but narrow towards the east, and contain one noticeable peak, Dhinodhar, about 1,000 feet high, reputed to have once been a volcano. Two other peaks, Jhura and Vārār, rise to nearly 900 feet. In the Vāgad hills the elevation is inconsiderable. The hilly islands of the Rann contain their highest point in the island of Pachham; the others, Chorad, Khadir, and Bela, not exceeding 617 feet. South-west of Pachham island is an extensive low-lying tract known as the Banni, running almost parallel to the coast of Cutch for 65 miles. It is apt to be covered in times of high flood, and probably owes its origin to a bar of sand from the rivers which flow north. It is inhabited only by herdsmen, who live in beehive-shaped huts, use no cots, and light no lamps at night.

There are no permanent rivers in Cutch, but during the rainy season (July to October) many streams of considerable size flow from the central ranges of hills northwards to the Rann and southwards to the Gulf of Cutch. For the rest of the year the courses of these streams are marked by a succession of detached pools. Owing to the porous nature of the upper soil, storage of water in ponds and reservoirs is difficult; but brackish water is readily found in rocks at no great depth from the surface, and wells of this kind are fairly numerous.

Of reservoirs Cutch possesses the Saror (meaning 'lake') in the east of the Charwar range, a round valley about 2½ miles broad, with a dam thrown across its narrow western outlet. The neighbourhood of Sindhdi in the west of the great Rann of Cutch has from the time of Alexander the Great (325 B.C.) been a fresh- or salt-water lake, a muddy hollow or a salt marsh, according as the Indus waters have succeeded or failed in reaching it.

From a geological point of view Cutch is one of the most complex and most interesting regions in India. A considerable part of the country, including the famous Rann, is covered by recent deposits. Some of these are alluvial, others in the Rann area may be partly alluvial and partly fluvio-marine, while others again, such as the sand-dunes and the curious calcareous 'sub-recent concrete,' are accumulations of wind-borne material. The sub-recent concrete is met with at all heights on the hill-slopes, while the sand-dunes and the recent deposits occupy only the lowest parts. The hills, and generally all the higher ground, contain an extremely varied succession of strata, ranging in age from Middle Jurassic (Bathonian) to upper miocene or lower pliocene. There is an almost uninterrupted sequence, covering the period corresponding to that included in Europe between the age of the great oolite and that of the lower greensand. The widespread unconformity which almost everywhere in Europe divides the Jurassic and Cretaceous is here filled up by a continuous series of sediments. The whole series consists largely of sandstones, many of which are unfossiliferous, while others contain only plant remains. Special difficulties are met with in attempting to correlate strata by means of vegetable remains; but fossiliferous marine intercalations recur at frequent intervals amid the unfossiliferous or plant-bearing beds of Cutch, and they readily give a clue to the age of every part of the series. This easy correlation of the Cutch beds is of great importance from a scientific point of view. The fossil plants contained in some of the upper beds of the series are identical with the fossils of the Upper Gondwāna; and as, on account of the difficulty of correlating beds by means of plant remains, the age of the Gondwāna series was for a long time a disputed question, the discovery of marine beds, associated with their representatives in Cutch, became the means of fixing the geological date of their upper limit. The Upper Gondwānas of Cutch are known as the Umia beds, from the name of a village situated about 50 miles north-west of Bhūj. They correspond in age approximately with the Weald.

The peculiar character of the great salt wastes, and the eruptions of basalt and fire-rent cliffs along the base of the hills, mark the early force of volcanic action in Cutch. Volcanoes are no longer at work, but frequent shocks of earthquakes show that this tract is still the centre of strong subterranean energy. On four occasions during the last century, namely, 1819, 1844, 1845, and 1864, earthquake waves have crossed Cutch. The most severe were the shocks of 1819, when 7,000 houses at Bhūj, including the Rao's palace, were destroyed, and 1,150 people buried in the ruins. Every fortified town in the State was injured, and, in the west, the fort of Terā, considered the strongest in Cutch, was levelled with the ground. One effect of this convulsion

was the fall, at several parts of its surface, of the bed of the Rann. Sinking is reported to have taken place in the east, in the north, and in the west. In the west, the change of level was most marked; for about 16 miles on either side of Sindhdi, a fortified custom-house on the left bank of the Kori river, the land would seem to have suddenly sunk from 8 to 12 feet, and the place has since been occupied by an inland lake or lagoon. North of Sindhdi, after the earthquake was over, a bank about 50 miles long and from 10 to 18 feet high stood out from the plains which had before stretched as level as the sea. On account of its sudden appearance across the old bed of the Indus, the natives gave to this bank the name of Allah Band, or 'God's embankment.' Early observers speak of it as an upheaval of the surface. But from the north side there is little sign of any rise in the land; and a few years after its formation (1826), the flood-waters of the Indus, keeping their former course, forced their way through the dam. These two considerations would seem to show that the apparent height of the bank, as seen from the south, is to some extent due to the fall in the level of the land in that direction.

Cutch is a land of few trees. The *nīm*, *pīpal*, and *babūl* are occasionally found near villages. The tamarind and the banyan are more rare, the mango requires care, and even on the coast the coco-nut is difficult to rear. Of large game, leopards and wild hog are to be found. Of smaller animals, the hare occurs in large numbers. The wild ass (*Equus hemionus*) frequents the wastes of the Rann.

Lying along the parallel line of the tropic of Cancer, Cutch is almost beyond the rain-bringing influence of the south-west monsoon. The annual rainfall at Bhūj for the ten years ending 1903 averaged only 12·6 inches. During this period the greatest amount registered in any one year was 26·5 inches in 1895, and the least 1·4 in 1900. Along the sea-coast, throughout the year, the climate is agreeable; and over the whole tract for nearly nine months it is cool and healthy. But in April and May burning heat and dust-storms prevail, and, again, during October and part of November the heat becomes excessive. In 1903 the temperature attained a maximum of 109° in May, and fell to a minimum of 46° in January.

History.

The earliest historic notices of Cutch are in the Greek writers. The waters of the Rann were known to Alexander (325 B.C.). About 150 years later Cutch was part of Menander's kingdom, and shortly afterwards passed into the hands of the Sakas. To them succeeded the Parthians. Between A.D. 140 and 390 the Kshatrapas of Surāshtra ruled in Cutch. It was included for a time in the Gupta kingdom of Magadha and was ruled later by the Vallabhi kings. In the seventh century Cutch formed part of the province of Sind. Hiuen Tsiang refers to it as K'ie-ch'a. Invasions

of Chārans, Kāthīs, and Chāvadas followed. In the ninth century the Arabs settled on the coast. In 1023 Bhīma Deo I of Anhilvāda fled before Mahmūd of Ghazni to Kandhkot; and at the close of that century the peninsula was overrun by Singhar, the fourth Sūmra ruler of Sind.

The modern history of Cutch may be said to date from its conquest by the Sind tribe of Sammā Rājputs in the fourteenth century. The Sammās fled to Cutch to escape the oppression of the Sūmras. The Chāvada Rājputs, who then ruled over Cutch, granted the Sammās a tract of land; but in time the latter subverted the rule of the Chāvadas, and reigned in their stead (1320). The section of the Sammās forming the ruling family in Cutch were known as the Jādejas, or 'children of Jāda.' When the rest of the Sammā tribe in Lower Sind embraced the orthodox Muhammadan faith, the Jādejas adopted as their religion a mixture of Hinduism and Muhammadanism. This fact has avowedly influenced their history. Isolated from the rest of their tribesmen and unable to obtain suitable husbands for their daughters, they were led to practise wholesale female infanticide, and enjoyed an evil reputation for this habit up to quite recent years.

Till 1540 the Jādejas ruled over Cutch in three branches; but about that year Khengār, the son of Jām Hamīr, with the assistance of the Muhammadan king of Ahmadābād, succeeded in making himself head of the tribe and master of the whole province. He also obtained from the king the grant of Morvi in the north of Kāthiāwār, with the title of Rao. The Jām Rāwal, uncle of Khengār, who had previously ruled over a part of Cutch, fled to Kāthiāwār and founded the present reigning house of Navānagar, the rulers of which are still called Jāms. Under the Ahmadābād kings, Khengār paid no regular tribute; but he was liable for military service with 5,000 horse. When their power waned, Bhārmal, the successor of Khengār, attempted to make himself independent; but after two defeats, in 1590 and 1591, he agreed to admit the supremacy of the Mughal emperor, and was confirmed in his former position. The tribute at first exacted was remitted by the emperor Jahāngīr on condition of his giving pilgrims a passage to Mecca. For six generations after Khengār the Raos succeeded according to primogeniture. On the death of Rāyadhan (1697), his third son Prāgji gained the throne by murder and usurpation. In order to pacify the son of his murdered brother, he placed him in independent charge of Morvi, which is still in the possession of his descendants. After 1718 the viceroy of Gujarāt sent numerous expeditions against Cutch, which were defeated, and the fort of Bhūj was built to repel their attacks. Subsequently a rebellion broke out, and Ghulām Shāh Kalhora, ruler of Sind, taking advantage of the disorders of the State, twice invaded Cutch with some success (1762–5). The disorder became

intensified by the insanity of the Rao and the struggles of rival factions, one of which was headed by the famous minister Fateh Muhammad, until in 1809 the help of the British Government was sought to restore order in the country. It was not considered expedient to interfere with the internal affairs of Cutch, and the treaty then made was chiefly directed to the suppression of piracy and the prevention of raids into Kāthiāwār. The treaty was little regarded; and all remonstrances failing, a British force moved into Cutch in 1815, when a new treaty was made, by which the British undertook to restore order, and Cutch to give compensation, ceding the fort of Anjār and twenty-three other villages. Peace having been restored, the British Government remitted all arrears due from Cutch, in return for which the Rao continued faithful to his alliance. But his debaucheries and cruelty excited the discontent of the Jādeja chiefs, who in 1818 applied for help to the British Government. As the Rao had made preparations for war, troops were moved against him, and Bhūj was captured. The Rao was deposed, and the Jādejas nominated a minor to be his successor, with the British Resident and a few chiefs as a regency. The British Government undertook the maintenance of order without introducing British civil or criminal jurisdiction, and guaranteed the Jādeja chiefs in their possessions. In 1822 the district of Anjār, formerly ceded to the British, was restored to Cutch for a yearly payment. The regency was closed in 1834 on the Rao's coming of age. The Rao of Cutch holds a patent or *sanad* from the British Government authorizing adoption, and in matters of succession the family follows the rule of primogeniture. He is entitled to a salute of 17 guns.

Population.

About the middle of the eighteenth century the population of Cutch is believed to have been considerably greater than it was for many years after. The misgovernment towards the close of the eighteenth century, the wars carried on by Fateh Muhammad, and the famine and pestilence of 1812, are said to have reduced the population by one-half. The enumerations of 1872, 1881, 1891, and 1901 returned the total population of the State at 488,507, 512,084, 558,415, and 488,022 respectively. In the last decade the population decreased by 13 per cent. through famine and plague. The results of the Census of 1901 may be summarized as follows:—Area 7,616 square miles, with 8 towns (Bhūj, Māndvi, Anjār, Mundra, Nalia, Jakhau, Bhachau, and Rapar) and 937 villages; average density of population, 64 persons per square mile. Hindus numbered 305,724, Muhammadans 111,238, Jains 70,467, Pārsīs 91, and Christians 53. About 9 per cent. of the total population are Rājputs and 5 per cent. are Brāhmans, while the cultivating, artisan, and other lower castes of Hindus constitute about 24 per cent. Of the Rājputs and their Bhāyād or 'brethren of the tribe,' the majority are Jādejas. *Satī* and

female infanticide were at one time very prevalent; the first has been suppressed entirely, and efforts for the suppression of the second have been attended with considerable success. In 1842 the proportion of males to females in the Jādeja tribe was found to be as 8 to 1; in 1901 it was about equal. Among the landed proprietors are a few Vāghela Rājputs, who reside in the cultivated spots of the arid country between North-Western Kāthiāwār and Sind. The languages of Cutch are nominally two: Kachchhī (Cutchī) and Gujarātī, the former being a colloquial dialect of Gujarātī little used now in literature or business. Gujarātī is the written language. Persian and Western Hindī are but slightly used or known.

Agriculture.

There is a fair proportion of good arable soil in Cutch. As most of it is sandy and easily tilled, holdings are large, averaging 35 acres. About 4,342 square miles are occupied for cultivation, of which 50 per cent. were under crop in 1903-4. Wheat and barley of indifferent quality are cultivated, as well as cotton, the ordinary varieties of millet and pulse, and a little garden produce. *Bājra* is of two kinds, small and large. Large *bājra* is sown in middling soils and grows best when the land is slightly salt. *Jowār* is chiefly grown on clay soils. The chief pulse is *korad* (*Phaseolus aconitifolius*). During the decade ending 1903-4 Rs. 95,000 was advanced to cultivators, mostly in the four years ending 1902-3.

The present daily wage of a carpenter or mason is 10 annas and of a labourer 6 annas. During 1903-4 the prices of the chief grains at Bhūj were: *bājra* 29 lb., wheat 26 lb., *jowār* 41 lb. per rupee.

Of domestic animals, the camel is the most important, being famous for its fleetness. The Rao possesses large herds of these animals, as well as of cows and buffaloes. Cutch was long famous for its horses. The increased facility of importing Arab and other horses has much reduced the value of the Cutch breed.

Irrigation is practised over a considerable area. Wells are the chief source, watering 97 square miles. Owing to the porous nature of the upper soil, storage of water in ponds and reservoirs is difficult.

There are scattered forest Reserves in the State, of which the principal produce is grass, the trees grown in them being for the most part thorny, stunted, and of no value for building timber. The forest receipts amounted to Rs. 22,629 in 1903-4, of which Rs. 17,377 was derived from grass. Great efforts have been made to plant trees on roadsides and pasture lands, and rewards have been offered for success in arboriculture.

Both iron and coal are found. Iron was formerly smelted, but at present the Cutch mines remain unworked. Coal seams occur in the Umia beds, but they are too thin to be worked at a profit. Alum and a coarse variety of saltpetre are also produced. In former times alum

was prepared in great quantities; but, partly owing to the competition of Chinese alum, and partly because Cutch alum is said to injure cloth prepared with it, the demand has recently been greatly reduced. It is manufactured at Madh from the pyritous clays or alum shales at the base of the Tertiary. The Karimori hills furnish strong tough millstones, and good building stone abounds. Some of the best varieties are furnished by the Lower Jurassic rocks, and others much used are found in the Upper Tertiary beds. A yellowish marble is found at Khāvda and exported.

Trade and communications.

The trade of Cutch is mostly carried by sea. The chief imports are: of raw produce, grain, butter, sugar, groceries, fruit, and timber; and of manufactured articles: iron, brass, and copper-ware, cloth, furniture, stationery, and ivory. The exports are alum and cotton, millet, pulse, garlic, clarified butter, black-coloured cloth, and silver-ware. The Rājputāna-Mālwa Railway is said to have had an injurious effect on the sea-borne trade of Cutch, as traffic is thereby diverted to Bombay and Karāchi. In 1903–4 the imports by sea and land amounted to nearly 91 lakhs, and the exports to 14 lakhs. The customs dues are for the most part collected departmentally; in 1903–4 they realized about 8 lakhs. From Māndvi, the chief port of Cutch, between the middle of August and the middle of June, vessels sail to Arabia, Maskat, Sind, Kāthiāwār, Bombay, and the Malabar coast. The Cutch sloops, called *cotias*, generally built with decks, are esteemed very good sea-boats; and the Cutch sailors, Musalmāns and the Khārva caste of Hindus, are equal to any to be found on the western coast of India, in both skill and daring. Māndvi used at one time to have a close connexion with Zanzibar, on the African coast, from which were imported ivory, rhinoceros hides, and slaves. The importation of slaves into Cutch was stopped in 1836. Transit duties were abolished in 1873. In addition to the beautiful embroidery and silver-work, for which Cutch is chiefly noted, its manufactures of silk and cotton are of some importance. There are three ginning factories and ten cotton-presses in the State, which turned out 7,700 bales in 1903–4.

Owing to the want of made roads, the country becomes almost impassable during the rainy months. But in the fair season there is land communication northwards with the south-east Districts of Sind, with Mārwār, with North Gujarāt, and across the Little Rann with Jhālawār, the north-eastern division of Kāthiāwār. The total length of metalled roads at the end of 1903–4 was 165 miles, and of unmetalled 19 miles, while avenues of trees are maintained on 25 miles. The principal roads are those from Bhūj to Mandoī, from Bhūj to Khari Rohar, and from Bhūj to Mundwar. There is at present no railway communication in the State; but one proposal under discussion is

to connect Wadhwān with Hyderābād through the Rao's territory, and the northern section of this line is already complete as far as Badin. An alternative alignment to the north of the Rann has also been proposed. A State line from the port of Tuna to Bhūj via Anjār is under construction. The number of post offices in the State was 110 in 1904, of which 11 were combined post and telegraph. The length of the Cutch State telegraph line is 230 miles.

Famine.

Of the early famines in Cutch little is known. In 1577 the State passed through a time of much distress. During the latter half of the eighteenth century there were seven famine years, 1746, 1757, 1766, 1774, 1782, 1784, and 1791. The famine of 1746 was very severe. In 1813 came the fiercest and most destructive famine, when many sold their children for food. A cat or dog was a delicacy and even human flesh was eaten. Since then until 1899 there have been at least fifteen years of severe scarcity. In two distress was due to the damage to the crops by locusts, in two to destruction done by rats, and in the others to capricious rainfall. In 1899–1900 the State suffered from famine owing to the short rainfall, which was only 2 inches, or one-sixth of the average. Relief works were organized, the daily number of persons employed on them rising to 49,022. The total cost of these works exceeded 24 lakhs, and Rs. 3,755 contributed by the Bombay Relief Committee was distributed in charitable relief.

Administration.

The territory of Cutch has various jurisdictions: the first comprises the State (*khālsa*) portion, under the direct management of the Rao; the second, the estates of the Bhāyād, or cadets of the Rao's house, a body of feudal landlords; the third jurisdiction is that over seven villages in the centre of the territory, known as the Adhoi subdivision, which belongs to the Thākur of Morvi in Kāthiāwār; the fourth is that of the Jādeja court, presided over by a British officer, for the trial of cases assigned to it under the settlement of 1875. For administrative purposes the State is divided into eight districts: namely, Abdāsa with Nakhtarāna, Anjār, Bachau, Bhūj with Khāvda, Lakhpat, Māndvi, Mundra, and Rāpar with Khadir.

The *Varishta Adālat* exercises full civil and criminal jurisdiction throughout the State, sentences of death and transportation for life and fourteen years' imprisonment being subject to confirmation by the Rao. The State contains 53 civil and 45 criminal courts, divided into three classes: those with jurisdiction in the Rao's domain only, those with jurisdiction in the estates of petty chiefs, and those whose power extends over the whole of the State. They include a special institution styled the Jādeja court, under the presidency of the Naib Dīwān, which consists of a bench of four Jādeja nobles, members of the Bhāyād chosen by the Rao. This court owes its origin to the settle-

ment of 1875 which made good the guarantee granted by the British Government to the Jādeja chiefs under the terms of the treaty of 1819. It hears civil and criminal cases arising both in the estates of the guarantee holders and beyond these. Since 1869 civil and criminal procedure codes have been introduced on the model of those in use in British territory. The commonest forms of crime are petty thefts and hurt, varied by occasional robberies.

The total revenue of the State, including that of the Bhāyād and other petty chiefs, is estimated at 36 lakhs, of which 19 lakhs belong to the Darbar and the balance to the *zamīndārs* and others. The chief sources in 1903-4 were customs (8 lakhs) and land revenue (6 lakhs), while recoveries of outstanding revenue contributed 2 lakhs, *sayar* and interest on invested capital one lakh each, stamps and excise Rs. 6,500 each, and miscellaneous revenue Rs. 30,000. The chief items of expenditure, which amounts annually to about 25 lakhs, are the tribute to the British Government (Rs. 1,86,950) for the maintenance of a British subsidiary force, the expenses of the Rao (1·2 lakhs), police (1·3 lakhs), revenue and customs (1·5 lakhs), exchange (2 lakhs), and advances (15 lakhs). The surplus revenue is invested in Government securities and in the purchase of *girās* lands in the State. There is a mint which coins *panchias* (= Rs. 1-5), *koris* (= 4 annas), and half-*koris*, which represent the ordinary currency of the State. The mint at present does not work at a profit, owing to the unusually high rates of *hundis*, or bills of exchange.

The revenue system is *bhāgbatai*, or rent in kind, the State share, which varies from one-seventh to one-third of the produce, being sold by auction. A high value is set upon the right of occupancy, but in *girāsiā* villages the cultivators are tenants-at-will. In State lands the right of occupancy is accorded only to those who have proved themselves worthy of the concession by sinking wells or converting 'dry crop' into garden land. The revenue survey, introduced in 1873 and as yet incomplete, was on measurement only and not on classification or assessment of the lands. The land revenue was formerly farmed out each year, but since 1878 it has been collected by the Darbār officials.

A notable fact in connexion with the administration of the Cutch State is the number and position of the Bhāyād. These are Rājput nobles forming the brotherhood of the Rao. They were granted a share in the territories of the ruling chief as provision for their maintenance, and are bound to furnish troops on an emergency. The number of these chiefs is 137, and the total number of the Jādeja tribe in Cutch is about 16,000. There have been several dissensions between the Rao and his Bhāyād, in which the British Government has mediated, guaranteeing to the latter enjoyment of their possessions. Their

estates do not descend according to primogeniture, but a system of subdivision prevails. The aggregate income of the Bhāyād is estimated at about 17 lakhs. Some of them are invested with the power of trying civil and criminal suits. The residuary jurisdiction is vested in the Darbār and is exercised through the Jādeja court.

There are four municipalities in the State, of which the principal are BHŪJ, MĀNDVI, and ANJĀR. Their total income in 1903–4 amounted to Rs. 28,000.

The outlay on public works during the ten years ending 1903–4 was 17 lakhs, exclusive of 24 lakhs expended upon relief works during the famine of 1900, the chief works being the improvement of Māndvi harbour, and the construction of roads to connect Bhūj with Abdāsa, Mundra, and Wagad in the eastern portion of the State. Nearly 2 lakhs was spent in 1903–4 on the Anjār-Tuna railway and roads.

The State is by treaty bound to defray the actual expenses of the subsidiary force stationed at Bhūj for the protection of the country, to the extent of 2 lakhs annually. The military force consists of 254 cavalry and 853 foot soldiers, including 281 Arabs. In addition there are some irregular infantry, and the Bhāyād could furnish on requisition a mixed force of about 4,000 men. The police force numbers 244 mounted and 572 foot. There are 12 prisons, with accommodation for 2,243 prisoners. The total prison population in 1903–4 was 1,855.

Of the total population, 8 per cent. (15·9 males and 1·2 females) could read and write in 1901. Education is sadly neglected among the Bhāyād, but a steady progress is observable. In 1881–2 there were 66 recognized schools in the State, with a total attendance of 5,342. The State schools comprise one high school, 6 Anglo-vernacular schools, 96 lower schools, 14 girls' schools (with 718 pupils), 10 night schools, one school of art, and one Sanskrit *pāthsāla*. The number of pupils in 1903–4 was 5,794 in the 129 State schools, and 128 private indigenous schools had an aggregate attendance of 5,064. The expenditure on education was Rs. 62,588. The State awards 98 scholarships, of which 57 are assigned to female students. The number of pupils at the Bhūj school of art is 156.

At the 11 hospitals and dispensaries in the State more than 100,000 persons were treated in 1903–4 at a total cost of Rs. 34,000. The lunatic asylum contained 9 inmates in the same year, and the number of persons successfully vaccinated was 31 per 1,000.

[Sir J. M. Campbell, *Bombay Gazetteer*, vol. v.]

Cutch, Rann of (Sanskrit, *Irina*).—A salt waste lying between 22° 55′ and 24° 43′ N. and 68° 45′ and 71° 46′ E., covering an area of about 9,000 square miles, and stretching along the north and east of the State of CUTCH, which it separates from Sind on the north and from

Rādhanpur and Kāthiāwār on the east and south. It varies in width from 25 to 35 miles on the north to 2 miles on the east. It is believed to be the bed of an arm of the sea, raised by some natural convulsion above its original level, and cut off from the ocean. It was a navigable lake in Alexander's time (325 B.C.) and a shallow lagoon at the date of the *Periplus* (third century A.D.), and there are local traditions of sea-ports on its borders. Geologically, it is of recent formation. The northern or larger Rann—measuring from east to west about 160 miles, and from north to south about 80—has an estimated area of not less than 7,000 square miles. The eastern or smaller Rann (about 70 miles from east to west), which is connected with the larger Rann by a narrow channel, covers an area estimated at nearly 2,000 square miles. Between March and October, when the whole tract is frequently inundated, the passage across is a work of great labour, and often of considerable danger. Some of this inundation is salt water, either driven by strong south winds up the Lakhpat river from the sea, or brought down by brackish streams; the rest is fresh, the drainage of the local rainfall. The flood-waters, as they dry, leave a hard, flat surface, covered with stone, shingle, and salt. As the summer wears on, and the heat increases, the ground, baked and blistered by the sun, shines over large tracts of salt with dazzling whiteness, the distance dimmed and distorted by an increasing mirage. On some raised plots of rocky land water is found, and only near water is there any vegetation. Except a stray bird, a herd of wild asses, antelope, or an occasional caravan, no sign of life breaks the desolate loneliness. Unseasonable rain, or a violent south-west wind at any period, renders the greater part of the Rann impassable. Owing to the effects of an earthquake in 1819 the Greater Rann is considerably higher in the centre than along the edges; while the centre, therefore, is dry, there are frequently water and mud at its sides. The Little Rann is at present undergoing a marked change. Year by year the sea is spreading farther eastward; and, along the coast, places which a few years ago were inaccessible to boats are now open to water traffic. There is a considerable manufacture of salt at KHĀRĀGHODA, the salt produced here being styled Barāgara salt, a name derived from the character of the soil.

Cuttack District.—District in the Orissa Division of Bengal, lying between 20° 2′ and 21° 10′ N. and 85° 20′ and 87° 1′ E., with an area of 3,654[1] square miles. It is bounded on the north by the Baitaranī river and Dhāmra estuary, which separate it from Balasore District; on the east by the Bay of Bengal; on the south by Purī; and on the west by the Tributary States of Orissa.

[1] The area shown in the *Census Report* of 1901 was 3,629 square miles. The area given above is that now reported by the Surveyor-General.

Physical aspects.

Cuttack consists of three distinct tracts: the first is a marshy jungle-covered strip along the coast, from 3 to 30 miles in breadth; the second is an intermediate arable tract of rice land in the older part of the Mahānadī delta; and the third is a broken hilly region along the western boundary. The marshy strip on the coast resembles the Sundarbans as regards its swamps, dense jungle, and noxious climate, but lacks the noble forest scenery of the Gangetic tract; it is intersected by innumerable streams and creeks, whose sluggish waters deposit their silt, and form morasses and quicksands. The arable plains stretch inland for about 40 miles, and are intersected by the large rivers that emerge from the western mountains and throw out in every direction a network of branches, which, after innumerable twists and interlacings, frequently rejoin the parent stream as it approaches the sea. The third tract consists of a series of ranges, seldom exceeding 10 to 15 miles in length, with thickly wooded slopes and lovely valleys between. Elsewhere only a few isolated hills break the evenness of the plains. The chief of these are NALTIGIRI with its sandal-trees and Buddhist remains; UDAYAGIRI with its colossal image of Buddha, sacred reservoir, and ruined temples and caves; and ASSIA, the highest point in the District (2,500 feet), with its old mosque. The MAHĀVINYAKA peak has for ages been consecrated to the worship of Siva.

The rivers, however, constitute the conspicuous feature of Cuttack. These issue in three magnificent streams through the mountainous frontier on the west. In the extreme north the sacred BAITARANĪ, the Styx of the Hindus, emerges from Keonjhar State in which it takes its rise, and forms the boundary between Cuttack and Balasore. In the south the MAHĀNADĪ or 'great river' pours down upon the delta from between two hills at Narāj, about 7 miles west of Cuttack city, where its stream is contracted to a mile in breadth. About half-way between the two the Brāhmanī enters the District. These rivers, whose upper channels dwindle during the cold season to insignificant streams dotted here and there with stagnant pools, bring down after heavy rains an enormous mass of water from the table-lands in which they take their rise. Towards the coast they gradually converge, and their accumulated waters rush down within 30 miles of each other upon the level plain, with the result that the beds are altogether inadequate to carry off the floods, which burst over the banks and sweep across the country. After innumerable bifurcations the three rivers enter the sea by various mouths. The Baitaranī and the Brāhmanī meet before they reach the sea, and the combined stream flows into the Bay of Bengal at Point Palmyras under the name of the Dhāmra. The Mahānadī after many interlacings forms two great estuaries: one generally known as the Devī, which enters the Bay at the south-eastern corner of the District, and

the other bearing the name of the parent river, the Mahānadī, which empties itself into the sea at False Point, about half-way down the coast. Each of these great rivers throws off, on its way through the District, a number of distributaries, those of the Mahānadī being the most numerous and important. The chief offshoots of the Mahānadī are the Kātjurī, Paikā, Birūpā, and Chitartala. The Brāhmanī receives, a little above its junction with the Baitaranī, an important tributary, the Kharsuā, which is itself an offshoot of the Brāhmanī.

To the south of the Brāhmanī river as far east as the Ulti *pargana* numerous gneissic hills are scattered over the country. For some miles the gneiss is compact, but farther south it assumes a peculiar more or less decomposed form, marked by numerous red blotches, the remains of disintegrated garnets. This form of gneiss is occasionally quarried for various purposes, its softness rendering it easy to work. The estate of Bānki contains some fine hills, the main peaks running in a semicircle from near Bānkīgarh to the village of Baideswar. These are partly of garnetiferous gneiss like those mentioned above, and partly of more compact and hornblendic rock. A large undulating plain to the south is partly covered with laterite, through which the gneiss rises at intervals. The hills near the Mahānadī west and south-west of Cuttack are formed of coarse grits, sandstones, and conglomerates, with subordinate white or pinkish clay belonging to the Gondwāna system[1].

In the Mahānadī delta swampy places on the banks of rivers and creeks near the sea have the vegetation of a mangrove forest. Where sand-dunes intervene between the sea and the cultivated land behind, an equally characteristic littoral vegetation is met with, the principal species being *Spinifex*, *Hydrophylax*, and *Geniosporum prostratum*. The cultivated land bears the usual rice-field weeds, while ponds and ditches are filled with floating water-weeds or submerged water-plants. Near human habitations shrubberies of semi-spontaneous origin are common. This undergrowth is loaded with a tangled mass of climbing *Convolvulaceae*. The arborescent portion of the village shrubberies includes the red cotton-tree (*Bombax malabaricum*), *jiyal* (*Odina Wodier*), *Tamarindus indica*, *Moringa pterygosperma*, *pīpal* (*Ficus religiosa*), banyan (*Ficus bengalensis*), and the palms *tāri* (*Borassus flabellifer*) and *khajur* (*Phoenix sylvestris*). There are no forests; but in the northwest especially are found other species of a more truly forest character, among them being *Ailanthus excelsa*, *Pterocarpus Marsupium*, *Pterospermum Heyneanum*, *Dalbergia paniculata* and *D. lanceolaria*, *Adina cordifolia*, *Schleichera trijuga*, and the like. The usual bamboo is

[1] *Memoirs, Geological Survey of India*, vol. i, part iii, 'On the Geological Structure and Physical Features of the Districts of Bānkurā, Midnapore, and Orissa'; and *Records, Geological Survey of India*, vol. v, 'Sketch of the Geology of Orissa,' by W. T. Blanford.

Bambusa arundinacea. Open glades are filled with grasses, sometimes of a reedy character. Sedges are abundant and ferns are fairly plentiful.

Tigers, bears, leopards, wild buffaloes, antelope, spotted deer, hog deer, hyenas, jackals, foxes, and wild hog are found. Fish-eating and man-eating crocodiles abound in all the rivers and creeks, and grow to a very large size. Comparatively little loss of life is caused by tigers and leopards, as these animals are confined chiefly to the dense jungles on the coast, or to the hilly portion of the District, where the population is sparse and where deer and hog supply them with sufficient food.

The District is directly on the track of the cyclonic storms which cross Orissa frequently during the monsoon season, and the extremes of climate are more marked than in most other parts of Bengal. In April and May the average maximum temperature is 102°. The mean temperature falls from 88° in the hot months to 83° in the monsoon season and to 69° in February. Owing to the occasional dry westerly winds in the hot season and to the later well-marked south-west monsoon conditions, humidity undergoes considerable variation, ranging on an average from 72 per cent. in April and May to 83 per cent. in August. The annual rainfall averages 60 inches, of which 4·6 inches fall in May, 9·9 in June, 11·7 in July, 12·3 in August, 10·3 in September, and 5·8 in October. Cyclonic storms occasionally occur in the north of the Bay in May, and with these storms weather of the south-west monsoon type prevails over the whole of Orissa.

The Orissa coast is not ordinarily liable to suffer from cyclones, which usually move towards the Arakan or Bengal coast. But in recent years several severe cyclones have been experienced, the most notable being that of September 23, 1885, which was accompanied by a storm-wave that caused much loss of life and property near the coast. In the Kendrāpāra subdivision alone 5,000 lives were reported to have been lost, while serious damage was caused to crops and houses. The Kanikā estate, which includes a considerable part of the affected seaboard, suffered most severely and many villages then destroyed have not since been inhabited. The salt deposited on the lands by the tidal wave affected the crops for about five years. As already stated, floods often occur, owing to the large volume of water brought down by the rivers during heavy rains. These cause much damage to crops and sometimes also to houses; and on the occasion of eight such floods, which occurred between 1831 and 1867, remissions of revenue were granted amounting to 8 lakhs. The canal system, which includes a number of high embankments serving the double purpose of protecting the irrigation works and the enclosed country from the action of floods, was opened in 1868; and since that year no remissions of land revenue have been necessary. The canal embankments, however, by

contracting the spill channels have increased the liability of the low unembanked tracts to floods, and the problem of protecting the crops of these areas from periodical loss is still unsolved.

History.

The District has no separate history, apart from that which will be found in the article on ORISSA. The city of CUTTACK possesses a special importance as having been for upwards of a thousand years the capital of the province. The ruins of a fort still stand at CHATIĀ, and other interesting archaeological remains exist at NALTIGIRI and UDAYAGIRI.

Population.

The population increased from 1,544,210 in 1872 to 1,795,065 in 1881, to 1,937,671 in 1891, and to 2,062,758 in 1901. The Census of 1872 was doubtless inaccurate, but a large part of the recorded growth between that date and 1881 was due to the recovery of the District from the terrible famine of 1866. The progress in the next decade would have been greater but for the cyclone of 1885. The District is healthy and comparatively free from malaria, but suffers from occasional epidemics of cholera. The chief statistics of the Census of 1901 are given below :—

Subdivision.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Cuttack . .	1,562	1	2,599	1,035,275	663	+ 5·4	79,876
Kendrāpāra .	977	1	1,338	467,081	478	+ 8·7	36,135
Jājpur . .	1,115	1	1,580	560,402	503	+ 6·6	43,075
District total	3,654	3	5,517	2,062,758	565	+ 6·5	159,086

The towns are CUTTACK, the head-quarters, JĀJPUR, and KENDRĀPĀRA. The population is sparse on the lower slopes of the hills and also on the sea-coast; but between these two extremes the population is dense, rising in Sālīpur *thāna* to 933 persons per square mile, whereas Aul on the sea-coast has only 298, and the hilly Bānki 377. There is a large emigration to the sparsely inhabited Native States to the west, and to the neighbouring Districts of Balasore and Purī. Numbers go to the metropolitan Districts, where they serve as palanquin bearers, doorkeepers, and labourers. Natives of Cuttack are also found as cooks and domestic servants throughout Bengal, and as cultivators and field-labourers in the Sundarbans, while many have emigrated to Assam and the United Provinces. The language of the District is Oriyā. Hindus number 2,002,573, or 97 per cent. of the total, and Musalmāns 57,356, or 2·8 per cent.

The chief castes are Brāhmans (195,000), Khandaits (375,000), Chāsas (266,000), Gauras (140,000), Kāndras (92,000), and Pāns

ranges, of which the first and the second, covering a total distance of $45\frac{1}{2}$ miles, lie in this District. It is very picturesque, skirting the base of the wooded hills along the western boundary. The two ranges command an aggregate area of 92 square miles, of which, however, only a small proportion is actually irrigated. The Jājpur canal, starting from the head-works at the point of bifurcation of the Baitaranī, runs for $6\frac{1}{2}$ miles to the town of Jājpur. It has a discharge of 7,000 cubic feet per second and commands 109 square miles. The total area irrigated from Government canals in 1903–4 was 267 square miles, practically all under rice. The rainfall is usually ample, and the value of canal-irrigation lies less in the improvement which it may render possible in the out-turn of an ordinary year than in the protection which it affords against a failure or partial failure in years of drought. Well-water is used only for garden crops and betel plantations. No tanks or other private works are used in ordinary seasons, but in times of drought the winter rice crop is irrigated from all available natural and artificial reservoirs; possibly one-eighth of the crop may be saved by these means.

Sandstone, laterite, and rubble are quarried from the hills in the western borders, but only for the railway and local use. The soft decomposing gneiss is used for building purposes.

Trade and communications.

The silver filigree work of Cuttack city is well-known. Cotton-weaving is extensively carried on, and other manufactures are bell-metal work, lac and brass ornaments, pottery, hardware, gunny-bags, and baskets; neat toys and sticks are turned from buffalo horn, deer horn, and ivory, and are largely bought by the pilgrims who pass through the District. The other hand industries are of the primitive description found in most parts of Bengal.

The chief exports are rice to Calcutta, Mauritius, and Ceylon; oilseeds, hides, jute, timber, horns, lac, nux-vomica, beeswax, resin, and silver filigree work to Calcutta; and bones to Calcutta and Ganjām. The chief imports are piece-goods, kerosene oil, crockery, glass-ware, fancy goods, metals, yarn, betel-nuts, and spices from Calcutta; salt from Calcutta and the Madras Presidency; jungle products, grain, and oilseeds from the Tributary States and the Central Provinces; and spices and condiments from Ganjām. The local trade is mainly in the hands of the Baniyā, Teli, Kewat, Guriā, Pātra, and Golā castes. The chief trade centres are Cuttack city, False Point port, and Chāndbāli, which is situated just outside the District. In 1903–4 the exports by sea from False Point port were 21 lakhs and the imports Rs. 6,000; practically the whole of this was foreign trade.

The Cuttack-Midnapore extension of the Bengal-Nāgpur Railway intersects the District from north to south. The Orissa trunk road

from Calcutta to Ganjām and the roads from Cuttack to Purī and Sambalpur are maintained from Provincial funds, their total length in the District being 61½ miles. In addition to these, 32 miles of metalled and 732 miles of unmetalled roads, including 382 miles of village tracks, were maintained in 1903–4 by the District board, the most important being those from Cuttack city to Tāldanda, Māchgaon, and Chāndbāli, and from Phulnākhrā to Mādhab. Feeder-roads from the interior to stations on the railway are being gradually constructed with the help of Government grants.

The rivers almost dry up in the hot season in the upper reaches, while during heavy floods they become too dangerous for navigation. The anicuts constructed across them have also cut off direct communication from the upper to the lower reaches. The Mahānadī affords unobstructed communication above the anicut with Sambalpur, from which grain is brought down by boats during the rains; but the traffic has been diminishing since the opening up of Sambalpur by railway. In the lower tidal reaches boats are largely used. The Tāldanda, Kendrāpāra, Gobri, High-level, and Jājpur canals are navigable, but their traffic has declined since the opening of the railway.

Steamers carrying passengers and goods ply three times a week from Cuttack city to Chāndbāli port by canal, and from Chāndbāli to Calcutta by sea. Cargo steamers call at False Point at irregular intervals.

Famine.

The crops are liable in unprotected areas to loss from deficient or unevenly distributed rainfall, and from the uncontrolled river-floods. The Bengal famine of 1770 was grievously felt in Orissa, but in recent times the great famine of 1865–67 is the only one comparable with that calamity. The rainfall of 1865 was scanty and ceased prematurely, so that the out-turn of the crop of winter rice, on which the population mainly depends, was reckoned at less than a third of the average. The gravity of the occasion was not perceived, and no special inquiries were instituted, while prices long remained so moderate that they offered no temptation to importers and forced no reduction in consumption on the inhabitants, till suddenly the province was found to be almost bare of food. In May, 1866, it was discovered that the markets were so empty that the jail prisoners and the Government establishments could not be supplied. But the southern monsoon had now begun, and importation by sea or land became nearly impossible. Orissa was at that time almost isolated from the rest of India; the only road, leading to Calcutta across a country intersected by large rivers and liable to inundation, was unmetalled and unbridged; and there was very little communication by sea. By great exertions, the Government succeeded in importing about 10,000 tons of grain by the end of November; and this was given away gratuitously, or sold at low rates, or distributed in wages

disuse. The derivation of Coromandel has been the subject of some discussion, but it is now generally held to be a corruption of Cholamandalam, 'the country of the Cholas.'

Cossimbazar (*Kāsimbāzār*).—Decayed town in the head-quarters subdivision of Murshidābād District, Bengal, situated in 24° 8′ N. and 88° 17′ E., on the Bhāgīrathi, and now included in the Berhampore municipality. Population (1901), 1,262. This town, the site of which is now a swamp marked by a few ruins, may lay claim to an historical interest superior even to that of the city of Murshidābād. Long before the days of Murshid Kulī Khān, who founded and gave his name to the latter city, the trade of Bengal centred at Cossimbazar, and the different European nations who traded to India had factories here from very early times. The common name for the Bhāgīrathi in English records down to the early years of the nineteenth century was the Cossimbazar river; and the triangular tract enclosed by the Bhāgīrathi, Padmā, and Jalangī was known in the early days of the Company as the Island of Cossimbazar. The place is said to derive its name from a legendary founder, Kāsim Khān. Its history cannot be traced back beyond the seventeenth century; but even when first mentioned it appears as a place of great consequence. After Sātgaon had been ruined by the silting up of the Saraswatī mouth, and before Calcutta was founded, Cossimbazar was the great emporium.

An English commercial agent was first appointed to Cossimbazar in 1658; and nine years later it was decided that the Chief at this place should be also a member of Council. In 1686 the factory at Cossimbazar, in common with the other English factories in Bengal, was confiscated by order of the Nawāb Shaista Khān; but it was restored a year or two later, and at the close of the century had become the leading English commercial agency in Bengal. In 1681, when Job Charnock, the future founder of Calcutta, was Chief at Cossimbazar, of £230,000 sent out by the East India Company as the investment to Bengal, £140,000 was assigned to Cossimbazar. In 1763, out of a total of £400,000 required as advances for investment, Cossimbazar demanded £90,000, or as much as any other two agencies, excepting Calcutta, and the filatures and machinery of the Company were estimated to be worth 20 lakhs. According to native tradition, the town was so studded with lofty buildings that the streets never saw the rays of the sun.

The factory of the Company at Cossimbazar owed much of its wealth, and all its political importance, to its close neighbourhood to the Muhammadan capital at Murshidābād. But from the same cause it was liable to constant danger. It was a matter of common occurrence for the Nawāb to order out his troops to blockade the walled factory, whenever he had any quarrel with the English Council at Calcutta. In

1757, when the Nawāb Sirāj-ud-daula resolved to drive the English out of Bengal, Cossimbazar felt the first effects of his anger. The factory was taken without resistance, and the Englishmen, including Mr. Watts, the Resident, and Warren Hastings, his assistant, were sent in custody to Murshidābād. After the battle of Plassey, Cossimbazar regained its commercial importance; but the political power formerly held by the Resident was transferred to the English Agent at the court of the Nawāb, who lived at Murshidābād.

The decay of Cossimbazar dates from the beginning of the nineteenth century, when its climate, which had previously been celebrated for salubrity, underwent an unexplained change for the worse, so that the margin of cultivation receded and wild beasts increased. In 1811 Cossimbazar town is described as noted for its silk, hosiery, *koras*, and inimitable ivory work, while the surrounding country was 'a wilderness inhabited only by beasts of prey.' In 1813 the ruin of the town was effected by a change in the course of the Bhāgīrathi, which suddenly deserted its ancient bed and, instead of following its former bend to the east, took a sweep to the west; it now flows 3 miles from the site of the old town. The channel in front of the warehouses of Cossimbazar became a pestiferous marsh, a malarious fever broke out, and the place gradually became depopulated. The Company's filatures, however, continued to work, and weaving ceased only when it became impossible any longer to compete with the cheaper cotton goods of Manchester. In 1829 a census returned the population at 3,538. The town is the seat of the Mahārājā of Cossimbazar, a descendant of Kānta Bābu, banian of Warren Hastings. His palace is a fine building, portions of which were constructed of beautiful carved stone taken from the palace of Chet Singh, the Mahārājā of Benares. Apart from this, ruins of huge buildings and broad mounds of earth alone remain to attest the former grandeur of the place. The first wife of Warren Hastings is buried here, and her tomb with its inscription is still in existence.

Cossipore-Chitpur (*Kāsīpur*).—Northern suburb of Calcutta, in the District of the Twenty-four Parganas, Bengal, situated in 22° 37′ N. and 88° 22′ E., on the left bank of the Hooghly river. Population (1901), 40,740, including 29,056 Hindus, 11,346 Musalmāns, and 338 Christians. Cossipore-Chitpur is a thriving industrial suburb, containing the Government Gun Foundry and Shell Factory, and a number of jute-presses, sugar and other factories. The town is within the jurisdiction of the Calcutta police. The municipality was separated in 1889 from the South Suburban municipality. The income during the decade ending 1901–2 averaged Rs. 1,36,000, and the expenditure Rs. 1,31,000. A reserve is being accumulated to carry out a drainage scheme which is under contemplation. In 1903–4 the income was

Rs. 1,58,000, including Rs. 70,000 derived from a tax on houses and lands, Rs. 25,000 from a conservancy rate, Rs. 28,000 from a water rate, Rs. 16,000 from jute warehouse fees, and Rs. 4,000 from a tax on vehicles. The incidence of taxation was Rs. 3-2-10 per head of the population. In the same year the expenditure was Rs. 1,65,000, the chief items being Rs. 13,000 spent on fire-engine establishment, Rs. 14,000 on lighting, Rs. 23,000 on water-supply, Rs. 7,000 on drainage, Rs. 54,000 on conservancy, Rs. 6,000 on medical relief, Rs. 16,000 on roads, and Rs. 2,000 on education. Filtered water is purchased from the Calcutta Corporation and distributed in the streets and by house connexions. The North Suburban is a large hospital, with 30 beds for men and 10 for women. The electric tramway from Calcutta has been extended to Belgāchia, where there is a Veterinary college.

Courtallum.—Village in Tinnevelly District, Madras. *See* KUTTĀLAM.

Covelong (*Kovalam*).—Village in the District and *tāluk* of Chingleput, Madras, situated in 12° 47′ N. and 80° 15′ E., on the east coast about 20 miles south of Madras City. Population (1901), 1,921. It was originally a Dutch settlement, and the Imperial East India Company of Ostend seems to have had a trading station here and to have built a fort. There are now no traces of either. The ruins at present in existence belong to the fort called Saādat Bandar, built by Anwar-ud-dīn Khān, Nawāb of the Carnatic from 1744 to 1749. In 1750 this was seized by stratagem by the French. A party of soldiers with arms concealed under their clothes and simulating extreme sickness were admitted into the fort by the kindly natives, who believed their tale that they were the scurvy-smitten crew of the ship which had just anchored off the coast, unable to proceed. During the night they rose and overpowered the garrison. In 1752 Clive invested the place and the French surrendered without firing a shot. The fortifications were then blown up. Covelong contains a Catholic church, an almshouse, and an orphanage founded and supported by a grant from the De Monte family, formerly rich merchants of Madras. At the present day the place depends almost entirely on the manufacture of salt. The pans lie to the west of the village, and are of large extent.

Cowcolly.—Village in Midnapore District, Bengal. *See* GEONKHĀLI.

Cox's Bāzār Subdivision.—Subdivision of Chittagong District, Eastern Bengal and Assam, lying between 20° 35′ and 21° 56′ N. and 91° 49′ and 92° 23′ E., with an area of 896 square miles. The subdivision comprises a long narrow strip of coast valleys and low ranges of hills, and the islands of Maiskhāl and Kutubdiā. The population in 1901 was 200,169, compared with 188,006 in 1891. The

subdivision is sparsely inhabited, the density being only 223 persons per square mile against 543 for the whole District. It contains one town, Cox's BĀZĀR (population, 3,845), the head-quarters; and 233 villages. Almost the whole subdivision is included in a Government estate. The only noteworthy place is SHĀHPURI ISLAND, the scene of the outbreak of 1823 which led to the commencement of the first Burmese War.

Cox's Bāzār Town.—Head-quarters of the subdivision of the same name in Chittagong District, Eastern Bengal and Assam, situated in 21° 27′ N. and 91° 59′ E. Population (1901), 3,845. The town is named after Lieutenant Cox, who in 1799 was appointed to supervise the Arakanese fugitives seeking shelter in British territory after the conquest of Arakan by the Burmans; two-thirds of the population are descendants of these refugees. Cox's Bāzār was constituted a municipality in 1869. The income during the decade ending 1901–2 averaged Rs. 5,000, and the expenditure Rs. 4,000. In 1903–4 the income was Rs. 5,300, mainly derived from a tax on persons (or property tax) and from tolls; and the expenditure was Rs. 5,000. The Arakanese weave silk *lungīs* or kilts, but the town is decadent, and the industry is languishing. The town contains the usual public offices; the sub-jail has accommodation for 20 prisoners.

Cuddalore Tāluk.—Head-quarters *tāluk* and subdivision of South Arcot District, Madras, lying between 11° 30′ and 11° 52′ N. and 79° 26′ and 79° 47′ E., on the coast of the Bay of Bengal. It is more thickly populated than any other, the density being 808 persons per square mile, compared with the District average of 450. The population in 1901 was 361,776, and 361,303 in 1891. It contains three towns—namely, the municipality of CUDDALORE (population, 52,216), the head-quarters of the *tāluk* and the District, PANRUTI (15,206), and NELLIKUPPAM (13,137)—and 224 villages. The demand for land revenue and cesses in 1903–4 amounted to Rs. 5,23,000. Large areas are planted with casuarina and fruit trees. The *tāluk* consists for the most part of a level alluvial plain of great fertility but few natural features. Diagonally across it, however, runs the plateau of Mount Capper, a high lateritic table-land, and here the rich alluvium gives place to a barren red soil in which little will grow.

Cuddalore Town.—Head-quarters of the *tāluk* of the same name and of the District of South Arcot, Madras, situated in 11° 46′ N. and 79° 46′ E., on the trunk road from Trichinopoly to Madras, 118 miles by road and 125 by rail south of Madras and 12 miles south of Pondicherry. It is made up of several different quarters, chief of which are Cuddalore New Town, consisting of Tirupāpuliyūr, noted for its ancient Siva temple, and Manjakuppam, containing the principal public offices and European bungalows picturesquely situated among fine trees on

Rs. 1,58,000, including Rs. 70,000 derived from a tax on houses and lands, Rs. 25,000 from a conservancy rate, Rs. 28,000 from a water rate, Rs. 16,000 from jute warehouse fees, and Rs. 4,000 from a tax on vehicles. The incidence of taxation was Rs. 3-2-10 per head of the population. In the same year the expenditure was Rs. 1,65,000, the chief items being Rs. 13,000 spent on fire-engine establishment, Rs. 14,000 on lighting, Rs. 23,000 on water-supply, Rs. 7,000 on drainage, Rs. 54,000 on conservancy, Rs. 6,000 on medical relief, Rs. 16,000 on roads, and Rs. 2,000 on education. Filtered water is purchased from the Calcutta Corporation and distributed in the streets and by house connexions. The North Suburban is a large hospital, with 30 beds for men and 10 for women. The electric tramway from Calcutta has been extended to Belgāchia, where there is a Veterinary college.

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Cox's Bāzār Subdivision.—Subdivision of Chittagong District, Eastern Bengal and Assam, lying between 20° 35′ and 21° 56′ N. and 91° 49′ and 92° 23′ E., with an area of 896 square miles. The subdivision comprises a long narrow strip of coast valleys and low ranges of hills, and the islands of Maiskhāl and Kutubdiā. The population in 1901 was 200,169, compared with 188,006 in 1891. The

subdivision is sparsely inhabited, the density being only 223 persons per square mile against 543 for the whole District. It contains one town, Cox's BĀZĀR (population, 3,845), the head-quarters; and 233 villages. Almost the whole subdivision is included in a Government estate. The only noteworthy place is SHĀHPURI ISLAND, the scene of the outbreak of 1823 which led to the commencement of the first Burmese War.

Cox's Bāzār Town.—Head-quarters of the subdivision of the same name in Chittagong District, Eastern Bengal and Assam, situated in 21° 27′ N. and 91° 59′ E. Population (1901), 3,845. The town is named after Lieutenant Cox, who in 1799 was appointed to supervise the Arakanese fugitives seeking shelter in British territory after the conquest of Arakan by the Burmans; two-thirds of the population are descendants of these refugees. Cox's Bāzār was constituted a municipality in 1869. The income during the decade ending 1901–2 averaged Rs. 5,000, and the expenditure Rs. 4,000. In 1903–4 the income was Rs. 5,300, mainly derived from a tax on persons (or property tax) and from tolls; and the expenditure was Rs. 5,000. The Arakanese weave silk *lungīs* or kilts, but the town is decadent, and the industry is languishing. The town contains the usual public offices; the sub-jail has accommodation for 20 prisoners.

Cuddalore Tāluk.—Head-quarters *tāluk* and subdivision of South Arcot District, Madras, lying between 11° 30′ and 11° 52′ N. and 79° 26′ and 79° 47′ E., on the coast of the Bay of Bengal. It is more thickly populated than any other, the density being 808 persons per square mile, compared with the District average of 450. The population in 1901 was 361,776, and 361,303 in 1891. It contains three towns—namely, the municipality of CUDDALORE (population, 52,216), the head-quarters of the *tāluk* and the District, PANRUTI (15,206), and NELLIKUPPAM (13,137)—and 224 villages. The demand for land revenue and cesses in 1903–4 amounted to Rs. 5,23,000. Large areas are planted with casuarina and fruit trees. The *tāluk* consists for the most part of a level alluvial plain of great fertility but few natural features. Diagonally across it, however, runs the plateau of Mount Capper, a high lateritic table-land, and here the rich alluvium gives place to a barren red soil in which little will grow.

Cuddalore Town.—Head-quarters of the *tāluk* of the same name and of the District of South Arcot, Madras, situated in 11° 46′ N. and 79° 46′ E., on the trunk road from Trichinopoly to Madras, 118 miles by road and 125 by rail south of Madras and 12 miles south of Pondicherry. It is made up of several different quarters, chief of which are Cuddalore New Town, consisting of Tirupāpuliyūr, noted for its ancient Siva temple, and Manjakuppam, containing the principal public offices and European bungalows picturesquely situated among fine trees on

the four sides of a large open plain; Devanāmpatnam, in which are the ruins of old FORT ST. DAVID; and Cuddalore Old Town, a seaport and the chief trading centre of the District. Two rivers, the Ponnaiyār and the Gadilam, pass through it to the sea; and the name of the town is supposed to be a corruption of Kūdal-ūr, meaning 'junction town,' or the place where the two rivers meet. These rivers are liable to heavy floods, and in 1884 they united and their waters swept through the town for twenty-four hours. The current tore across the plain round which the offices stand to a depth of 5 feet, and a youth narrowly escaped drowning close to the old time-gun there.

The population of Cuddalore in 1871 was 40,290; in 1881, 43,545; in 1891, 47,355; and in 1901, 52,216. It has thus increased steadily in size, and is now the eleventh largest town in the Presidency. Of the total in 1901, 47,833 were Hindus, and the remainder were about equally divided between Christians and Musalmāns. Cuddalore was constituted a municipality in 1866. The municipal area extends over 13 square miles, including 18 villages and hamlets. The receipts and expenditure during the ten years ending 1902–3 averaged Rs. 50,500 and Rs. 49,300 respectively. In 1903–4 the income was Rs. 59,000, chiefly derived from the house and land taxes (Rs. 16,600) and tolls (Rs. 13,600); and the expenditure was Rs. 57,500, including conservancy (Rs. 16,800), roads and buildings (Rs. 11,200), and the municipal hospital (which contains beds for 48 in-patients) and dispensaries (Rs. 10,400). Being the administrative head-quarters of the District, Cuddalore contains all the chief public offices and courts, a Protestant and a Roman Catholic church, the District jail, &c., besides the sea-customs and marine establishments. The Collector's residence is the old Garden House of the Governors of Fort St. David, which was the scene of some fierce fighting in the wars with the French. The port of Cuddalore is the largest in South Arcot. Coasting steamers call periodically, and foreign vessels also touch to load with ground-nuts, the chief export of the District. The total imports and exports in 1903–4 were valued at 20 lakhs and 137 lakhs respectively. An old-established European firm has an important branch office here, which is located in the building originally constructed for the East India Company's factory and afterwards used as the District jail; and other firms are being attracted by the ground-nut trade.

Cuddalore has a reputation for healthiness; and elephantiasis, which was at one time painfully frequent, is now disappearing from the Old Town, owing to the supply of filtered water from a reservoir near by. This supply is, however, brought down only to one part of the town and is limited in quantity. A more ambitious scheme has been prepared, but its cost (3·7 lakhs) is more than the municipality is able to afford at present. A dispensary for women and children, near the

railway station in New Town, built by Rājā Sir S. Rāmaswāmi Mudaliyār, is maintained from Local and municipal funds. *Kailis* and fabrics of silk mixed with cotton are the chief manufacture. On the outskirts of the town, on Mount Capper (the Bandapolam Hill of Orme), is the new District jail, which was constructed by convict labour and has accommodation for 406 prisoners. Considerable quantities of cotton goods, including carpets and towels, are manufactured by the convicts.

Cuddalore is the educational centre of the District, the chief institutions being St. Joseph's College, a French Roman Catholic establishment of the second grade possessing a boarding-house for native Christians; and the Cuddalore College, which is managed by a local committee and teaches up to the matriculation standard.

The history of Cuddalore dates as far back as 1682, when the Company opened negotiations with the Khān of GINGEE for permission to settle here. In 1684 a formal lease was obtained for the present port and the former fortress, of which no remains now exist. During the next ten years trade increased so rapidly that the Company erected Fort St. David for the protection of the place and rebuilt their warehouses. On the fall of Madras in 1746, the head-quarters of the Presidency were transferred to Fort St. David, where they remained till 1752.

Cuddapah District (written 'Kurpah' in the old records, which still survives as the trade-name of Madras indigo).—The south-easternmost of the CEDED DISTRICTS in the Madras Presidency, lying between 13° 27′ and 15° 14′ N. and 77° 51′ and 79° 29′ E., with an area of 8,723 square miles. *Kadapa* means a 'gate' in Telugu, and the name is said to be derived from the fact that Cuddapah town is the gate to the holy places at TIRUPATI. The District is bounded on the north by Kurnool, on the east by Nellore, on the south by North Arcot and Mysore territory, and on the west by Anantapur. It consists of two well-marked natural divisions. The four south-western *tāluks* form part of the Mysore plateau and stand at a greater elevation (1,500 to 2,250 feet) than the rest of the District. Separated by the Seshāchalam and Pālkonda Hills, the other *tāluks* lie at a lower level. The conditions of these two tracts differ widely. The upland *tāluks* are mainly composed of red, infertile soil, broken up by numberless groups of small rocky hills. Much of the low country is made up of a wide expanse of black cotton soil, backed by the brown line of the hills and dotted here and there with clumps of *babūl* trees and small rocky elevations, which are covered with verdure in the wet season and in their most sheltered nooks, but for much of the year are burnt up and arid. Except the Pālkonda range, which thus divides the District, the hills in Cuddapah

Physical aspects.

are usually too disconnected to have received any specific names or largely to affect the conformation of the country. The only exceptions are the spurs of the Nallamalais, which run down from Kurnool into the *tāluks* of Badvel and Proddatūr in the extreme north.

The whole of the District drains into one river, the Penner. This runs from west to east below the Pālkonda Hills through the low-country *tāluks*, and passes into Nellore District by the gap in the Eastern Ghāts at Somasila. Its chief tributaries in the lower *tāluks* of Cuddapah are the Sagileru, which flows through Badvel and Sidhout, and the Kunderu, which passes through Proddatūr. The four upland *tāluks* drain into three main streams—the Cheyyeru, the Pāpaghni, and the Chitrāvati—which eventually find their way through gaps in the Pālkonda Hills and join the Penner in the low country. Except the Cheyyeru, these streams have their original sources outside the District. The Chitrāvati rises near Nandidroog in the State of Mysore, and for most of its course runs through Anantapur District. It joins the Penner in the north-westernmost corner of Cuddapah District in the Jammalamadugu *tāluk*. The Pāpaghni ('sin-destroyer') also has its source in Mysore, runs across the upland part of Cuddapah nearly due north, flows through the large tank of Vyāsasamudram at Kandukūr, and thence through the Pālkonda Hills near Vempalle to join the Penner in the Cuddapah *tāluk*. The Kunderu rises in Kurnool, and drains the great cotton-soil plains which stretch between Nandyāl in that District and Proddatūr in Cuddapah. The Sagileru springs from the higher peaks of the Nallamalai Hills not far from Cumbum in Kurnool District, and in Cuddapah flows in a deep channel along a narrow valley. The Cheyyeru rises within Cuddapah District in the Vāyalpād *tāluk*, and after being fed by several small jungle streams, the principal of which is the Bāhudānadī, flows through the Pālkonda Hills and the rich valley which once formed the petty chiefship of Chitvel, and falls into the Penner not far from the eastern limit of the District. None of these streams is in any sense perennial. They are filled from the drainage of bare, rocky country devoid of heavy forests, and consequently become torrents for a few days and then as suddenly dwindle to thin trickles of water flowing through wide sandy beds. The gorge of the Penner at Gandikota and the narrow pass by which the Cheyyeru flows down to the low country are both famous for the beauty of their scenery.

Geologically, the District is of considerable interest. The rocks of the upland *tāluk* differ widely from those of the rest of the country. They are mainly Archaean granites and gneisses, and often, as at Horsleykonda and among the hills west of Madanapalle, run up into masses of much boldness and beauty. Crossing them are three narrow bands of the younger Dhārwar series, all running nearly due south;

and intruded through them are an extraordinary number of dioritic trap dikes, which form a striking network of black ridges, devoid of all vegetation, seaming the face of the country in every direction. The low country in the north-west of the District, below the Pālkonda Hills, is occupied by much younger azoic sedimentary rocks belonging to the Cuddapah and Kurnool series. The base of the Cuddapah system occurs along the southern edge of the Pālkonda Hills. Here in one spot is exposed a great thickness of quartzites, called the Guvalcheruvu quartzites, forming a fine scarp over 30 miles long. These are overlaid by a series of slaty beds, known as the Vempalle slates, which in their turn are covered by the Nagari quartzites and the great Pullampet slate series. More quartzites cap the Pālkonda Hills as they run southward out of the District, forming the picturesque red scarp which overlooks the upland *tāluks*; and yet others crown the section of the Eastern Ghāts, sometimes called the Velikonda hills, which limits the District on the east. The rocks of the Kurnool system, which rest upon and cover up the Cuddapah rocks in the valley of the Kunderu, consist of limestones and overlying shales of the Jammalamadugu group of the system. The limestones are of the Narji series, and are fine grained and compact. The proximity of the Narji quarries to the railway has led to their being widely employed for a variety of purposes, under the name of 'Cuddapah slabs.'

The flora of the District is not peculiar or distinctive. In the upward *tāluks* it consists largely of drought-resisting plants such as cactus, Euphorbias, and Asclepiads; and the most noticeable trees are perhaps the date-palms which fringe all the hollows, and the tamarinds which always do well on granite soil. In the low country the flora resembles that of the other black cotton-soil areas, and the commonest tree is the *babūl* (*Acacia arabica*). The chief trees on the hills are referred to below in the account of the Forests.

A few tigers, *sāmbar*, and spotted deer are found in the heavier forests, as also wild hog and an occasional *nīlgai*. The boulder-strewn hills of the upland *tāluks* afford admirable dwelling-places for bears and leopards. On the plains are antelope, *chinkāra* (Bennett's gazelle), wolves, and hyenas. Peafowl and jungle-fowl are not rare, and quail abound, but snipe are less common.

The climate differs greatly in the two natural divisions of which the District consists. The malaria of the basin in which CUDDAPAH TOWN lies is most virulent, and has on more than one occasion led to proposals to move the head-quarters of the District to some other station. Fever also occurs along the foot of and among the various hills, and in the Kadiri *tāluk*. But most of the upland part of the District is exceptionally healthy and bracing. The temperature here resembles that of the Mysore plateau, being warm for three months but pleasant

enough during the rest of the year. The Cuddapah basin, on the other hand, is the hottest place in the whole Presidency, the mean temperature in May being 95°, and the heat beginning early in the year and lasting till late.

The rainfall, like the temperature, varies considerably in different parts. The annual fall for the whole District averages about 28 inches. Pullampet receives more than the other *tāluks* during the north-east monsoon, and its average is consequently by far the highest. Next in amount comes the fall in Sidhout and Cuddapah. The northern low-country *tāluks* receive 9 inches less than these last, and Jammalamadugu is the driest part of the District. The upland area is somewhat more fortunate, the fall there averaging 27 inches. Almost the whole District is included within the famine zone of the Presidency, and distress is frequent. Owing to causes already mentioned, floods also often occur. In 1803, 1818, and 1820 excessive rain greatly damaged the irrigation works; and in 1851, during a violent storm, 500 people were drowned in a village which was swept away. A serious accident occurred on the railway in 1870 at Nandalūr, owing to the washing away of the bridge over the Cheyyeru; and in 1902 two spans of the railway bridge near the Mangapatnam station were swept away by a sudden deluge of rain, the mail train was precipitated into the gap, and 71 lives were lost.

History.

Cuddapah was never a political centre, and its history consists chiefly of raids made upon it by the rulers of neighbouring regions. From the eleventh to the thirteenth century it formed part of the territory of the CHOLA kings of Tanjore, then at the height of their power. During the fourteenth century, it seems to have passed under the Hindu kings of Vijayanagar; and, on the downfall of their rule in 1565 at the hands of the Muhammadan kings of the Deccan, it was overrun by one of the victors, the Kutb Shāhi Sultān of Golconda. The upland *tāluks* thereafter fell under the unchecked authority of small military chiefs, who had formerly held the forts on service tenure and who thenceforth remained in power through all the changes in sovereignty which supervened, until the British arrived and reduced them to order. Cuddapah town similarly continued in the hands of the successors of a Pathān Nawāb to whom it was granted about this time, and whose family played an important part in the various stormy episodes that occurred within the District.

In 1678 the troops of Sivajī, the founder of the Marāthā power in India, devastated the District. Ten years later Aurangzeb, the Mughal emperor of Delhi, overran it. During the Carnatic Wars of the eighteenth century, in 1750, the Nawāb of Cuddapah treacherously shot Nāsir Jang, the Sūbahdār of the Deccan, and joined his rival, Muzaffar Jang, the protégé of the French. In the following year,

dissatisfied with the general results of the war, he headed a conspiracy in which Muzaffar Jang himself lost his life in the narrow pass of Lakkireddipalli, in the Rāyachoti *tāluk*. Salābat Jang, the new Sūbahdār of the Deccan, reduced the District in 1752 and placed it under Adoni, to the charge of which he nominated the infant son of his predecessor, Muzaffar Jang. In 1757 the District was overrun by the Marāthās. A decisive battle was fought near Cuddapah, in which the Nawāb was killed, and the town was left to the mercy of the freebooters. The Marāthās were, however, unable to reduce the rest of the District; and they entered into a treaty with the new Nawāb which secured to them half the country, including the strong fortress of GURRAMKONDA, which they garrisoned to guard their share. Five years later, Haidar Alī of Mysore seized Gurramkonda, and three years afterwards, in accordance with a secret treaty with Nizām Alī, then Sūbahdār of the Deccan, proceeded to take possession of the rest of the District. He was, however, opposed by Mādhava Rao, the Marāthā Peshwā, whose forces retook Gurramkonda. But Mādhava Rao died in 1772, and Haidar reoccupied the fort and garrisoned it. In 1780 he marched against the Nawāb of Cuddapah, utterly defeated him, took him prisoner to Seringapatam, and put all his family to death except a sister, a beautiful girl of eighteen, whom he placed in his *zanāna*.

After the death of Haidar in 1782 the District was under the rule of Kamar-ud-dīn, one of the ablest generals of Tipū, Haidar's son and successor, and it enjoyed comparative quiet. On the outbreak of the war with Tipū in 1790, Gurramkonda was besieged by the Nizām. It held out until, by the treaty of 1792, it was ceded to the Nizām with the major portion of the District. In 1799, after the death of Tipū at the storm of Seringapatam, the remaining portion of the District also fell to the Nizām. In 1800, however, the whole of it was ceded by him to the British, in payment for a subsidiary force to be stationed in his territories.

Major (afterwards Sir Thomas) Munro was appointed the first Collector of the territories so acquired, and his principal difficulty in reducing them to order was the turbulence and contumacy of the local military chieftains, known as *poligārs*. Within a year, however, he had brought them to submission, resuming the estates of some and pensioning the others, and he then set himself to reorganize the revenue administration. Since then the peace of the District has been but twice disturbed. In 1832 the Pathāns of Cuddapah, mistaking an act committed by one of their own faith for an outrage on their principal place of worship, raised a riot and, in a fit of fanaticism, murdered Mr. Macdonald, the Sub-Collector. Fourteen years later, in 1846, Narasimha Reddi, a descendant of a dispossessed

poligār on the Kurnool frontier of the District, dissatisfied with the small pension he received, attempted to raise a general rebellion and assembled some thousands of men. He was, however, captured by a British detachment and publicly hanged.

The most interesting antiquities in the District are perhaps the forts at GURRAMKONDA and GANDIKOTA. Prehistoric stone implements occur in large quantities along the valley of the Penner. There are dolmens in a few places. Some old Hindu coins and an *aureus* of Trajan have been discovered. The most noteworthy Hindu temples are those at Sompalle and Kadiri.

Population.

The number of towns and villages in the District is 1,247. The population in 1871 was 1,351,194; in 1881, 1,121,038; in 1891, 1,272,072; and in 1901, 1,291,267. The decline in 1881 was due to the great famine of 1876–8. Owing to the three bad seasons which occurred during the decade ending 1901, the increase in that period was extremely small; and by the end of it the District had failed to recover the population lost twenty-five years before. Cuddapah is divided into the eleven *tāluks* of BADVEL, CUDDAPAH, JAMMALAMADUGU, KADIRI, MADANAPALLE, PRODDATŪR, PULIVENDLA, PULLAMPET, RĀYACHOTI, SIDHOUT, and VĀYALPĀD. Statistics of population, based on the Census of 1901, are given in the following table:—

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Jammalamadugu	616	1	129	103,707	168	+ 2·4	5,168
Proddatūr . .	478	1	86	102,570	215	+ 4·2	4,181
Pulivendla .	701	1	101	103,396	147	− 2·3	4,646
Sidhout . .	606	...	79	68,087	112	+ 1·9	2,819
Badvel . .	755	2	111	89,361	118	− 4·1	4,306
Pullampet . .	979	1	127	143,521	147	− 3·7	6,213
Cuddapah . .	764	1	152	155,541	204	+ 0·4	8,920
Madanapalle .	837	1	99	136,977	164	+ 7·6	5,426
Kadiri . .	1,158	1	139	145,503	126	+ 7·8	4,395
Rāyachoti . .	998	1	89	113,912	114	+ 0·6	4,936
Vāyalpād . .	831	...	125	128,692	155	+ 1·3	4,661
District total	8,723	10	1,237	1,291,267	148	+ 1·5	55,671

The head-quarters of the *tāluks* (except that of Pullampet, which is at Rāzampeta) are at the places from which each is named. The chief towns are the municipality of CUDDAPAH, the administrative head-quarters of the District, and MADANAPALLE, the head-quarters of a divisional officer.

Cuddapah is larger than Wales, and ranks third in area among the Districts of the Presidency; but the density of the population,

like that of all the Deccan Districts, is low, only two *tāluks* having as many as 200 persons to the square mile. Almost all the people speak Telugu, which is the prevailing language in every *tāluk*, the only other vernacular of importance being Hindustāni, which is spoken by about 8 per cent. of the population. Like the other Deccan Districts, Cuddapah presents a curious deficiency in the number of females, who are much outnumbered by the males. Of the total population, 1,142,454 are Hindus and 129,537 Musalmāns. The latter bear a higher proportion (10 per cent.) to the total than is usual outside the Deccan.

Except the wandering tribe of the Yerukalas, who are more numerous here than in any other Madras District, the great majority of the Hindus are Telugus by race, though they include a sprinkling of Tamils from the south. The two most numerous castes are the cultivating Kāpus or Reddis (300,000), and the trader and agriculturist Balijās (119,000); while among communities which, though not numerically remarkable, are found in greater strength in Cuddapah than elsewhere in the Presidency, may be mentioned the Besthas, who live by cultivation and fishing in tanks, the Patras, who are *shikāris* and agriculturists, and the Togata weavers. Brāhmans are few, numbering only 18 in every 1,000 of the Hindu population. A majority of the Musalmāns returned themselves as Shaikhs, but the Dūdekulas—a race sprung from intermarriage between Musalmāns and Hindu women—are exceptionally numerous. Pathāns and Saiyids are also more numerous than elsewhere.

By occupation the people are even more exclusively agricultural than usual, 71 per cent. subsisting by the land, and a further 3 per cent. by the tending and rearing of cattle, sheep, and goats. Weavers are also proportionately numerous. Persons subsisting by the various professions are, on the other hand, comparatively few.

Of the 18,800 native Christians in the District, nearly 18,000 are Protestants. The Jesuit missionaries were the first to begin operations, but their work does not apparently date from farther back than the early part of the eighteenth century. Their chief station was Krishnapuram. The Christians there were constantly harassed by the persecutions of Tipū, which resulted in the eventual dispersion of the congregation. Later, another station was established at Satyapuram in the Proddatūr *tāluk*. The subversion of the Jesuits had the usual disastrous effect on these missions. From the beginning of the last century up to 1842 they were in charge of the Pondicherry Mission, and in 1843 they were transferred to the Vicar Apostolic of Madras. There are at present only 600 Roman Catholics in the District. Of the Protestant missions the chief are the London Mission, the American Arcot Mission, and the Society for the Propagation of the Gospel. The

first of these originally began work in 1822 in Cuddapah town, and has gradually extended its operations into the Proddatūr, Jammalamadugu, Pulivendla, Sidhout, and Kadri *tāluks*. The second has been established in the Madanapalle and Vāyalpād *tāluks* since 1886; and the last, which started forty years after the London Mission, is working in Badvel and Jammalamadugu.

Agriculture.

Agricultural practice differs with the varying characteristics of the several parts of the District. The four upland *tāluks* undulate so continuously that it would be difficult to find in them a single square mile of perfectly level ground. The soil is thin and poor, but in the numerous villages lie narrow strips where the soil washed down from above is of better quality. These are often protected by chains of small tanks or artificial reservoirs. The three eastern *tāluks* contain belts of alluvium along the banks of the rivers which traverse them, and throughout these the underground supply of water is good and wells are numerous. Much of the four northern *tāluks* consists of a plain of black cotton soil; but in the Cuddapah *tāluk* wide stretches have been rendered useless by the salts and alkalies with which they are impregnated. In each of these several tracts the agricultural practice differs. The poorer soils are sown after light showers, the cotton soil when it has been thoroughly soaked, and the irrigated land only when the tanks have received their supplies. Generally speaking, the most important sowing season for both 'dry' and 'wet' land is from August to October: that is to say, by the middle of October nearly three-fourths of the 'dry' land and nearly half of the 'wet' land should have been sown.

The District is composed entirely of *ryotwāri* and *inām* lands, and contains no *zamīndāris*. The area shown in accounts is 8,710 square miles, distributed as follows in 1903-4:—

Tāluk.	Area shown in accounts.	Forests.	Cultivable waste.	Cultivated.	Irrigated.
Jammalamadugu	612	58	16	349	22
Proddatūr	478	102	29	276	36
Pulivendla	701	107	51	335	31
Sidhout	606	335	10	83	32
Badvel	742	283	83	206	41
Pullampet	978	423	62	213	69
Cuddapah	764	194	76	354	82
Madanapalle	838	151	51	332	43
Kadiri	1,160	218	112	488	35
Rāyachoti	999	306	74	286	35
Vāyalpād	832	183	84	270	44
Total	8,710	2,360	648	3,192	470

It will be seen that 27 per cent. of the District is covered with forests and a further 29 per cent. is not available for cultivation, while only

37 per cent. is cultivated. The staple food-grains are *cholam* (*Sorghum vulgare*), *cambu* (*Pennisetum typhoideum*), and *rāgi* (*Eleusine coracana*), the areas under which in 1903-4 were 456, 586, and 189 square miles respectively, or 16, 20, and 6 per cent. of the total area cropped. *Cholam* is the most prominent crop in the cotton-soil tracts in Pulivendla, Jammalamadugu, Cuddapah, and Proddatūr; and *cambu* on the red soils in Rāyachoti, Kadiri, Vāyalpād, and Madanapalle. Rice occupied 352 square miles. Next in importance come various pulses. Cotton is grown mainly in Jammalamadugu, Proddatūr, and Pulivendla; indigo in Pulivendla and Cuddapah; and castor in Kadiri, Madanapalle, and Rāyachoti. Half of the area cultivated with horse-gram (the crop of the poor soils) is in the Kadiri *tāluk*. Tobacco is raised in small areas all over the District; sugar-cane chiefly in the upland *tāluks*; and melons chiefly in Sidhout and to some extent in Cuddapah.

The total extent of holdings during the five years preceding the famine of 1876-8 averaged 1,305,000 acres. By 1903-4 this had increased to 1,340,000 acres, or by only 2·7 per cent. The famine of 1876 did immense harm to the country, which has hardly yet recovered. Little has been effected towards the improvement of the quality of the crops grown. The ryots have, however, availed themselves largely of the Land Improvement Loans Act. Between 1888 and 1904 more than $7\frac{1}{2}$ lakhs was advanced under this enactment, the greater portion of which has been laid out in digging or repairing wells.

Cattle and sheep are bred in a casual fashion in many parts of the District. The best cattle are, however, imported from Nellore and Mysore by travelling drovers, who sell them to the ryots on the instalment system. Sheep are of two breeds, the Kurumba and the Semmeri. The former are black-faced sheep carrying white wool, which is woven into coarse blankets by the Kuruba caste. The latter are brown and covered with hair instead of wool, and are valued only for their flesh and their manure.

Of the total area of *ryotwāri* and 'minor *inām*' lands cultivated, 470 square miles, or 15 per cent., were irrigated in 1903-4. Of this amount only 15 per cent. was supplied from canals, while 40 per cent. was watered from wells and 39 per cent. from tanks.

There are only two works in the District, the KURNOOL-CUDDAPAH CANAL and the Sagileru project, which are sufficiently important to have separate capital and revenue accounts kept for them. The area irrigated by the former varies greatly with the season, the ryots taking little water except in bad years. In 1903-4 it supplied 20,000 acres. The Sagileru project, which irrigated 7,000 acres in the same year, consists of a dam across the river of that name and a channel that feeds ten tanks. The Chapād and the Vemula tank projects are two addi-

tional schemes which are under construction. The great Tungabhadra project, now under investigation, would increase the supply in the Penner river and benefit the land commanded by it.

Of the 4,361 tanks in the District the chief are those in Badvel, Porumāmilla, Kandukūr, and Peddatippasamudram (Madanapalle *tāluk*). In the upland *tāluks* there are a great number of small tanks, the area supplied by each of which is often less than an acre.

Wells are in many parts the chief support of the ryot in times of deficient rainfall. There are 47,000 of them in working order. The average area irrigated by each well ranges, according to the nature of the soil, from about 1½ acres in Madanapalle, Vāyalpād, and Rāyachoti to 5 acres in Jammalamadugu and Pullampet. Leathern buckets drawn up with a rope and pulley by cattle working down an inclined plane are universally used for lifting water. The Cuddapah ryot does not back the animals up the ramp between each bucketful as in some other Districts. He detaches them and lets them walk round to the top, where they are again fastened to the rope to raise the next bucket.

Forests.

The forests of the District cover 2,360 square miles, or 27 per cent. of the area for which particulars are available. They are confined almost entirely to the hills, hardly any being found on the low ground; the largest continuous areas are on the Pālkonda Hills in the Pullampet, Rāyachoti, and Sidhout *tāluks*, and on the Nallamalais. The extent and value of the forests has recently led to their being subdivided into the three charges of South, North, and West Cuddapah, each under a District Forest officer with head-quarters at Cuddapah town.

At present the growth in them consists mainly of coppice shoots. The annual rainfall is insufficient for the production of large timber, the forests are heavily grazed by licensed cattle, and fires are of frequent occurrence in the hot season, when the whole country is as dry as tinder. The most important trees are *Anogeissus latifolia*, the uncommon red-sanders (*Pterocarpus santalinus*), *yepi* (*Hardwickia binata*), a graceful, birch-like tree which produces perhaps the hardest and heaviest timber in India, *Terminalia tomentosa*, *Shorea Talura*, and some teak and satin-wood (*Chloroxylon Swietenia*).

Honey and wax and other minor products are collected by the Yānādis, a wild jungle race, who will climb in search of them into apparently inaccessible places.

Metallic minerals are scarce in Cuddapah. Some iron ores exist in the Nallamalais and elsewhere, but they are not now worked. The argentiferous galena of Jangamrāzupalle and Vonipenta has attracted attention. Extensive old workings for it occur in villages to the north of the road from Cuddapah to Badvel. Some shingle beds in the

valley of the Penner east of Chennūr and 4 or 5 miles north of Cuddapah town were worked for diamonds by washing between 1860 and 1870, but the results were not encouraging.

Good building stone is common all over the District. Granite, limestone, slate, and sandstone are quarried in considerable quantities in different places, and laterite is found in appreciable amounts in the Cuddapah *tāluk*. The 'Cuddapah slabs' have already been referred to.

There are no industries of importance. Cotton-weaving is of the ordinary kind, only coarse cloths being made. In the Jammalamadugu *tāluk* turbans of a coarse kind and carpets are woven, which are sent to the Central Provinces for sale. Pullampet has a reputation for its lace cloths, which are sent to Madras and other places. At Proddatūr two cotton-presses work during the cotton harvest. There are nearly 2,000 indigo-vats, two sugar-mills, and four small tanneries.

Trade and communications.

Cuddapah has no particular trade. It exports what little surplus agricultural products it raises, and imports in return the necessaries of life which are not produced locally. The chief exports are pulses, horse-gram, castor seed, *cholam*, cumin seed, indigo, turmeric, jaggery (coarse sugar), tamarind, *pishānam* rice, and cotton; while the chief imports are salt, European piece-goods and metal ware, gingelly oil, coco-nuts, and kerosene oil. Cumin seed is sent to all the southern parts of the Presidency, and cotton chiefly to Madras. Proddatūr, Jammalamadugu, Vāyalpād, and Pullampet are the centres of general trade, and the principal trading caste is the Komatis. The Mārwāris, who are foreigners, do some of the trade of the upland *tāluks*. Most of the internal commerce is carried on at weekly markets. Some of these are under the control of the local boards, and in 1903-4 more than Rs. 7,500 was collected in market fees. The most important are those at Pulivendla, Pileru, Madanapalle, Burakoilkota, and Proddatūr.

The north-west line of the Madras Railway (standard gauge) enters the District at Peddapādu in its south-east corner, and runs diagonally across it to the north-west corner, passing by Cuddapah town. It was opened in 1864-6. The South Indian Railway (metre gauge) enters the District near Pileru on the southern frontier, and runs in a north-westerly direction to join the Southern Mahratta Railway at Dharmavaram in Anantapur District. It was opened in 1892. A branch from this to Rāyachoti, which has been surveyed, would protect an area very liable to famine. The total length of metalled roads is 642 miles, and of unmetalled roads 662 miles, maintained from Local funds. There are avenues of trees along 953 miles. Roads are fairly numerous in the eastern and northern sections of the District,

where, however, the loose nature of the soil makes them expensive to maintain; and in the southern portion, on the harder red soils, they are plentiful. The section of the Kurnool-Cuddapah Canal in the Proddatūr and Cuddapah *tāluks* is open for navigation for a part of the year.

Famine.

The greater part of the District lies within the famine zone of the Presidency, the only *tāluks* not distinctly included in it being those which form the eastern section. It has suffered repeatedly from bad seasons. Between 1800 and 1802, considerable distress prevailed, and relief works were opened. Other scarcities occurred in 1805–7, 1824, and 1833. In 1866 very high prices obtained. The worst season ever known was the great famine of 1876–8. At the height of this, in September, 1877, there were 139,000 persons on relief works, besides 157,000 in receipt of gratuitous relief. Together, these made up no less than 22 per cent. of the total population. The Census of 1881 showed a decrease of 230,156, or 17 per cent., as compared with the Census of 1871. This loss was due to the famine. Including advances to agriculturists and weavers and remissions of land revenue, the distress in this District alone cost the state at least 70 lakhs. In 1891–2 there was again severe scarcity. In May, 1892, more than 12,000 persons were on relief. Including remissions of assessment and advances to agriculturists, the cost was 12¼ lakhs. Scarcity once more appeared in 1896–7, owing to deficient rainfall. At the height of the famine, in July, 1897, 123,100 persons were being relieved—106,400 on works, and 16,700 gratuitously. The cost to the state, including the sums lent to agriculturists and remissions of land and other revenue, was about 21½ lakhs. The last scarcity, in 1900–1, was less severe. The largest number on relief works was 4,100 (in August, 1901), and the number fed at kitchens was 1,400 in the following month. The total expenditure was 5½ lakhs, including about Rs. 20,800 received from the Indian Famine Charitable Relief Fund. Weavers were helped by granting them advances to be repaid in woven cloth. These advances amounted to Rs. 93,500, and Rs. 85,000 was recovered by the sale of the cloth.

Administration.

For administrative purposes the District is distributed into four subdivisions, one of which is usually in charge of a member of the Indian Civil Service, while the others are under Deputy-Collectors recruited in India. These subdivisions are: Madanapalle, comprising the four upland *tāluks* of Rāyachoti, Kadiri, Vāyalpād, and Madanapalle; Jammalamadugu, comprising Proddatūr, Jammalamadugu, and Pulivendla in the north-west corner; Sidhout, comprising Badvel, Sidhout, and Pullampet on the eastern frontier; and Cuddapah, which consists of the single *tāluk* of that name. There is a *tahsīldār* at the head-quarters of each *tāluk*, and (except at

Vāyalpād, Sidhout, and Badvel) a stationary sub-magistrate also. Deputy-*tahsīldārs* are stationed at Pileru, Chitvel, Kamalāpuram, and Cuddapah. The superior staff of the District consists of the usual officers, except that, as already mentioned, there are three Forest officers. The head-quarters of the Executive Engineer are at Madanapalle.

Civil justice is administered by a District Judge and four regular District Munsifs. The Court of Sessions at Cuddapah hears the serious criminal cases. Murders are more than usually common, being mostly due to spite or jealousy. Dacoities increase, as elsewhere, in times of scarcity. In many villages there are rival parties, one faction being led by the village headman and the other by some other influential person. This state of things frequently gives rise to rioting, murder, and other offences. Crime has become less frequent since the provisions of the Criminal Procedure Code, which enable security to be demanded from suspicious characters, have been rigorously enforced.

Little is known of the revenue history of the District previous to its occupation by the British. Munro's first settlement is the earliest matter on which there is accurate information. Owing to the fact that he took charge towards the end of 1800, he had time that year to conduct only a hasty settlement with the village as the unit. This was based on the *kāmil* assessment made by the Muhammadan government, the assessment of 1788-9 under Tipū Sultān, and that of 1799-1800 under the Nizām. The revenue received was only about 12 lakhs, compared with 23 lakhs raised by the Musalmāns. The next year (1801-2) Munro introduced a *ryotwāri* settlement. He also began a new survey and settlement, which was completed in five years. At the end of that time (1807) the revenue amounted to 17 lakhs, but in the following year it rose to 22 lakhs, and in the succeeding year to over 23 lakhs. Munro took leave in 1807. The next year the villages were rented out as small farms for a term of three years, the step being preparatory to a permanent lease. This plan was not at all successful, and a longer lease, for ten years, was inaugurated in 1811. The nominal revenue of the District during this lease was higher than it had ever been, but few of the renters were able to pay their dues. The system was a complete failure, and on the expiration of the lease in 1821 the *ryotwāri* system introduced by Munro was reverted to. Reductions in Munro's rates of assessment, amounting to 25 per cent. in the case of 'dry' land, and 33 per cent. on 'wet' and garden land, were sanctioned at the same time. The immediate result of this was a fall in the revenue to about 15 lakhs. But thenceforward the receipts began steadily to rise, and the revenue in 1830 was nearly 20 lakhs. About 1866, a new survey of the District was begun, and a new settlement was put in hand in 1874 and completed

in 1883. The survey found an excess in the cultivated area of 8 per cent. over the area shown in the revenue accounts, and the settlement enhanced the total revenue by Rs. 1,08,000, or 7 per cent. The average assessment on 'dry' land is now R. 0-7-3 per acre (maximum Rs. 5, minimum 4 annas), and on 'wet' land Rs. 4-9-6 (maximum Rs. 10, minimum Rs. 2). The survey and settlement are now about to be revised.

The revenue from land and the total revenue in recent years are given below, in thousands of rupees:—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	21,44	21,36	20,92	25,20
Total revenue . .	26,16	29,47	28,39	33,18

Outside the municipality of Cuddapah, local affairs are managed by the District board and the four *tāluk* boards of Sidhout, Madanapalle, Cuddapah, and Proddatūr, the areas of which correspond with the four administrative subdivisions above mentioned, the Proddatūr *tāluk* board controlling matters in the Jammalamadugu subdivision. The total expenditure of these bodies in 1903-4 was about 3 lakhs, of which nearly a lakh was laid out on roads and buildings. The chief source of their income is, as usual, the land cess. In addition, the affairs of seventeen of the smaller towns are managed by Union *panchāyats* established under Madras Act V of 1884.

The Superintendent of police at Cuddapah has general control over the force within the District. There are 90 police stations; and in 1904 the force numbered 1,040 constables (including 111 head constables) and 515 *ghāt talaiyāris*, working under 20 inspectors, besides 1,094 village *talaiyāris*, or rural police. The *ghāt talaiyāris* are special watchers stationed at the more desolate parts of the main roads to protect travellers from dacoits.

The District jail at Cuddapah was closed in 1895, owing to the unhealthiness of the town. Convicts sentenced to periods of imprisonment exceeding one month are now sent to Vellore, Bellary, or Nellore. A portion of the old jail is, however, used as a subsidiary jail for persons under trial, prisoners sentenced to thirty days and under, and convicts *en route* to Vellore, &c. There are also 13 other sub-jails, which can collectively accommodate 265 males and 110 females, at the stations of the ten *tahsīldārs* and the three deputy-*tahsīldārs*.

Educationally, Cuddapah is backward. It ranks eighteenth among the twenty-two Districts of the Presidency in the literacy of its population, of whom only 4·3 per cent. (8·1 males and 0·4 females) are able to read and write. The Cuddapah and Madanapalle *tāluks* are the least illiterate. The total number of pupils under instruction in

1880–1 was 6,701; in 1890–1, 14,329; in 1900–1, 19,856; and in 1903–4, 21,590. The improvement during the last twenty-three years has thus been great. On March 31, 1904, there were in the District 985 educational institutions, of which 906 were classed as public and 79 as private. Of the former, 6 were managed by the Educational department, 92 by the local boards, and 6 by the Cuddapah municipality; while 347 were aided from public funds, and 455 were unaided but conformed to the rules of the department. They comprised 891 primary, 14 secondary schools, and one training school. The girls in them numbered 2,499. The District possesses no Arts college. The very great majority of the pupils under instruction are in primary classes. Of the male population of school-going age 17·6 per cent. were in the primary stage in 1903–4, and of the female population of the same age 2·6 per cent. Among Musalmāns (who, however, form a comparatively small proportion of the population) the corresponding percentages were 35·0 and 5·1. About 650 Panchama pupils were under instruction at 188 schools especially maintained for depressed castes. The two high schools are the municipal high school at Cuddapah and the native school at Madanapalle. The total expenditure on education in 1903–4 was Rs. 1,25,000, of which Rs. 49,000 was derived from fees. Of the total, 82 per cent. was devoted to primary schools.

The District possesses 3 hospitals and 9 dispensaries, which contain accommodation for 98 in-patients. In 1903 the number of cases treated was 105,000, of whom 1,100 were in-patients, and 2,850 operations were performed. The expenditure was Rs. 26,200, the greater part of which was met from Local and municipal funds. The hospitals at Madanapalle and Cuddapah possess endowments from public subcription; and there is an excellent mission hospital at Jammalamadugu.

In regard to vaccination the District has generally been backward. In 1903–4 the number of persons successfully vaccinated was only 24·6 per 1,000 of the population, or far less than the mean for the Presidency (30). Vaccination is compulsory in the municipality of Cuddapah and in twelve of the seventeen Unions.

[For further information regarding the District see the *Cuddapah District Manual*, by J. D. B. Gribble (1875).]

Cuddapah Tāluk.—Subdivision and *tāluk* in the District of the same name, Madras, lying between 14° 17′ and 14° 43′ N. and 78° 21′ and 78° 55′ E., with an area of 764 square miles. It is bounded on the south and east by the Pālkonda Hills, and on the north partly by the Lankamalla range. The population in 1901 was 155,541, compared with 154,899 in 1891; and the density was 204 persons per square mile, the District average being 148. The annual rainfall is 32 inches, compared with the District average of 28 inches. It con-

tains one town, CUDDAPAH (population, 16,432), the head-quarters of the *tāluk* and District; and 152 villages. The demand for land revenue and cesses in 1903-4 amounted to Rs. 3,13,000. The Cuddapah valley, in which the town lies, is a basin completely shut in by hills on three sides, and is excessively hot and notoriously malarious. The Penner traverses the *tāluk* from west to east, and receives within its limits three subsidiary streams: the Kunderu from the north, which joins it near Kamalāpuram; the Pāpaghni from the south, which runs into it below the same town; and the Buggeru, which after having received several affluents, flows into it close by the town of Cuddapah. The *tāluk* lies beyond the limit of black cotton soil which covers the western side of the District, and its soil is for the most part alluvial, overlying beds of argillaceous slates. This is by no means good generally, and is often rendered quite worthless by the presence of saltpetre, common salt, and soda, all of which occur as efflorescences. Agricultural practice is decidedly better than in other parts of the District. The methods are not much more elaborate than elsewhere, nor the implements much more perfect; but manuring and the rotation of crops are better understood, and the situation in the vicinity of centres of population and of commercial activity strengthens the hands of the ryot by increasing the demand for his produce and by rendering money available at moderate rates. The *tāluk* is fortunate in its water-supply, but the floods in the Penner might be more utilized.

Cuddapah Town.—Head-quarters of the District and *tāluk* of the same name in Madras, situated in 14° 29′ N. and 78° 50′ E., 507 feet above the level of the sea, 161 miles from Madras City by rail. Population (1901), 16,432, of whom half are Muhammadans who have, as a class, a reputation for illiteracy and religious intolerance. The name is sometimes derived from the Sanskrit *kripa*, 'mercy'; but others connect it with *kadapa*, meaning in Telugu a 'gate,' since the place is in some sense the gate from the north to the sacred town of TIRUPATI. During the Musalmān occupation it went by the name of Neknāmābād, after its supposed founder, Neknām Khān. It lies a few miles from the south bank of the Penner, and being enclosed on three sides by rocky hills is one of the hottest places in the Presidency, the average maximum temperature from March to June being over 100°. It also has a very bad name for malaria, and proposals have more than once been made to transfer the District head-quarters elsewhere. The Executive Engineer has been moved to Madanapalle, and the London Mission and the Madras Railway have also changed their head-quarters in the District to more healthy stations. The native town is surrounded by irrigated land, and the houses in it are squalidly built (generally of mud), badly constructed, and without free ventilation. The introduction of a supply of drinking-water from the Buggeru has

probably to some extent lessened its unhealthiness. It has been proposed to prohibit 'wet' cultivation in the immediate neighbourhood. A drainage scheme estimated to cost 5 lakhs is under consideration, and the preliminary cutting of a channel through the town to remove the surplus subsoil water which stagnates below has been sanctioned. The present town seems to be comparatively modern. It is probable that one of the lieutenants of the Golconda army erected the fort about 1570; but it is not till the beginning of the eighteenth century, when the Pathān Nawāb of Cuddapah had absorbed the whole of the neighbouring tracts except Gooty, and had extended his conquests to the Bāramahāl, that Cuddapah appears as the capital of a separate principality. The ultimate fate of its Nawābs is referred to in the account of the history of the District. The country was ceded to the Company by the Nizām in 1800, and the town was made the head-quarters of the District in 1817, and was a military cantonment until 1868. It was constituted a municipality in 1866. The municipal income and expenditure during the ten years ending 1902–3 averaged Rs. 46,000. In 1903–4 the income was Rs. 56,000, mostly derived from the taxes on houses and lands and tolls; and the expenditure was Rs. 49,000. The chief buildings are the Collector's office, erected in stone in 1889 at a cost of 2½ lakhs; Christ Church, designed by Mr. Chisholm, the late Government architect, and one of the prettiest of the Madras country churches; and the Collector's residence, a more than usually commodious building.

Culna.—Subdivision and town in Burdwān District, Bengal. *See* KALNA.

Cumbum Tāluk.—Easternmost *tāluk* of Kurnool District, Madras, lying between 15° 10′ and 15° 52′ N. and 78° 45′ and 79° 19′ E., with an area of 1,061 square miles. The population in 1901 was 115,881, compared with 117,602 in 1891, the density being only 109 persons per square mile. The *tāluk* contains one town, CUMBUM (population, 6,502), formerly the head-quarters; and 101 villages, of which as many as 27 are 'whole *ināms*.' The demand for land revenue and cesses in 1903–4 amounted to Rs. 1,99,000. The greater part of the *tāluk* is hilly, being shut in between the Velikondas (a section of the Eastern Ghāts) on the east and the Nallamalais on the west. Several low hills intersect the middle; and down the valleys formed by these flow the chief rivers, the Gundlakamma, Jampaleru, and Sagileru, the first two of which drain the northern portion, while the third flows through the southern part and ultimately falls into the Penner in Cuddapah District. The scenery of these valleys is fine, especially around the Pullalacheruvu waterfall. The way in which the rivers often run in deep gorges between hills affords admirable facilities for the formation of tanks by throwing dams across them. The most

noteworthy instance is the magnificent Cumbum tank, formed by an embankment built across the Gundlakamma river. The formation of the country is also favourable to the digging of wells. The prevailing soil is red and gravelly. The climate is generally unhealthy, and malarial fever is very prevalent in Cumbum town. The annual rainfall averages 25 inches. More than half the *tāluk* is covered with 'reserved' forests (599 square miles), which afford excellent pasture for cattle and sheep. It is poorly off for road communications, the western and northern portions being practically inaccessible during the rains.

Cumbum Town.—Town in the *tāluk* of the same name in Kurnool District, Madras, situated in 15° 35′ N. and 79° 6′ E. Population (1901), 6,502. Formerly it was the head-quarters of a Head Assistant Collector and *tahsīldār*, and a regiment was stationed here. Though built upon a sandstone rock and favourably situated for drainage, the town has a bad name for unhealthiness, which is mainly due to the use of bad drinking-water. With the idea of improving the sanitation of the town, it was constituted a municipality in 1866; but eventually the municipality was abolished and the Government offices transferred elsewhere. It is now a Union under the Madras Local Boards Act V of 1884. It possesses a hospital and the chief market in the District east of the Nallamalais, which is visited by traders from Guntūr, Palnād, Ongole, &c. Brightly coloured carpets of fast dyes, possessing a local reputation, are manufactured here on a small scale. By far the most noteworthy feature of the town is, however, the magnificent tank formed by damming a gorge through which flows the Gundlakamma river. The height of the dam is 57 feet. The traditional belief is that the tank was built by the sage Jamadagni; it is also said to have been constructed, or considerably improved, by the Gajapatis of Kalinga in the fifteenth century, and to have been restored later by the Vijayanagar princess Varadarājamma. It has a drainage area of 430 square miles and a capacity of 3,696 million cubic feet. The area irrigated by it in 1903–4 was 5,500 acres of first crop and 4,800 acres of second crop, or 10,300 acres in all. The revenue derived was Rs. 42,300.

Cutch (*Kachchh*, or 'The sea-coast land').—Native State under the political superintendence of the Government of Bombay, bounded on the north and north-west by the province of Sind, on the east by Native States under the Pālanpur Agency, on the south by the peninsula of Kāthiāwār and the Gulf of Cutch, and on the south-west by the Indian Ocean. Its limits, exclusive of a portion of the great salt marsh termed the RANN, extend from 22° 47′ to 24° N. and from 68° 25′ to 71° 11′ E., comprising a belt of land 160 miles from east to west and about 35 to 70 miles from north to south. The area of the State (exclusive

of the Rann) is 7,616 square miles, and it contains 8 towns and 937 villages. The capital is BHŪJ, where the chief or Mahārao resides. From its isolated position, the special character of its people, their peculiar dialect, and their strong feeling of personal loyalty to their ruler, the peninsula of Cutch has more of the elements of a distinct nationality than any other of the dependencies of Bombay.

Physical aspects.

The whole territory of Cutch is almost entirely cut off from the continent of India—north by the Great Rann, east by the Little Rann, south by the Gulf of Cutch, and west by the Arabian Sea. Though on the whole treeless, barren, and rocky, the aspect of the country is varied by ranges of hills and isolated peaks, by rugged and deeply cut river-beds, and by well-tilled valleys and tracts of rich pasture land. On the south, behind a high bank of sand that lines the sea-coast, lies a low, fertile, and well-cultivated plain from 20 to 30 miles broad. Beyond this plain, the country is broken by three hill ranges, those of Cutch proper, of Vāgad in the east, and the Rann islands in the north. The hills of Cutch proper spread widely in the west, but narrow towards the east, and contain one noticeable peak, Dhinodhar, about 1,000 feet high, reputed to have once been a volcano. Two other peaks, Jhura and Vārār, rise to nearly 900 feet. In the Vāgad hills the elevation is inconsiderable. The hilly islands of the Rann contain their highest point in the island of Pachham; the others, Chorad, Khadir, and Bela, not exceeding 617 feet. South-west of Pachham island is an extensive low-lying tract known as the Banni, running almost parallel to the coast of Cutch for 65 miles. It is apt to be covered in times of high flood, and probably owes its origin to a bar of sand from the rivers which flow north. It is inhabited only by herdsmen, who live in beehive-shaped huts, use no cots, and light no lamps at night.

There are no permanent rivers in Cutch, but during the rainy season (July to October) many streams of considerable size flow from the central ranges of hills northwards to the Rann and southwards to the Gulf of Cutch. For the rest of the year the courses of these streams are marked by a succession of detached pools. Owing to the porous nature of the upper soil, storage of water in ponds and reservoirs is difficult; but brackish water is readily found in rocks at no great depth from the surface, and wells of this kind are fairly numerous.

Of reservoirs Cutch possesses the Saror (meaning 'lake') in the east of the Charwar range, a round valley about 2½ miles broad, with a dam thrown across its narrow western outlet. The neighbourhood of Sindhdi in the west of the great Rann of Cutch has from the time of Alexander the Great (325 B.C.) been a fresh- or salt-water lake, a muddy hollow or a salt marsh, according as the Indus waters have succeeded or failed in reaching it.

From a geological point of view Cutch is one of the most complex and most interesting regions in India. A considerable part of the country, including the famous Rann, is covered by recent deposits. Some of these are alluvial, others in the Rann area may be partly alluvial and partly fluvio-marine, while others again, such as the sand-dunes and the curious calcareous 'sub-recent concrete,' are accumulations of wind-borne material. The sub-recent concrete is met with at all heights on the hill-slopes, while the sand-dunes and the recent deposits occupy only the lowest parts. The hills, and generally all the higher ground, contain an extremely varied succession of strata, ranging in age from Middle Jurassic (Bathonian) to upper miocene or lower pliocene. There is an almost uninterrupted sequence, covering the period corresponding to that included in Europe between the age of the great oolite and that of the lower greensand. The widespread unconformity which almost everywhere in Europe divides the Jurassic and Cretaceous is here filled up by a continuous series of sediments. The whole series consists largely of sandstones, many of which are unfossiliferous, while others contain only plant remains. Special difficulties are met with in attempting to correlate strata by means of vegetable remains; but fossiliferous marine intercalations recur at frequent intervals amid the unfossiliferous or plant-bearing beds of Cutch, and they readily give a clue to the age of every part of the series. This easy correlation of the Cutch beds is of great importance from a scientific point of view. The fossil plants contained in some of the upper beds of the series are identical with the fossils of the Upper Gondwāna; and as, on account of the difficulty of correlating beds by means of plant remains, the age of the Gondwāna series was for a long time a disputed question, the discovery of marine beds, associated with their representatives in Cutch, became the means of fixing the geological date of their upper limit. The Upper Gondwānas of Cutch are known as the Umia beds, from the name of a village situated about 50 miles north-west of Bhūj. They correspond in age approximately with the Weald.

The peculiar character of the great salt wastes, and the eruptions of basalt and fire-rent cliffs along the base of the hills, mark the early force of volcanic action in Cutch. Volcanoes are no longer at work, but frequent shocks of earthquakes show that this tract is still the centre of strong subterranean energy. On four occasions during the last century, namely, 1819, 1844, 1845, and 1864, earthquake waves have crossed Cutch. The most severe were the shocks of 1819, when 7,000 houses at Bhūj, including the Rao's palace, were destroyed, and 1,150 people buried in the ruins. Every fortified town in the State was injured, and, in the west, the fort of Terā, considered the strongest in Cutch, was levelled with the ground. One effect of this convulsion

was the fall, at several parts of its surface, of the bed of the Rann. Sinking is reported to have taken place in the east, in the north, and in the west. In the west, the change of level was most marked; for about 16 miles on either side of Sindhdi, a fortified custom-house on the left bank of the Kori river, the land would seem to have suddenly sunk from 8 to 12 feet, and the place has since been occupied by an inland lake or lagoon. North of Sindhdi, after the earthquake was over, a bank about 50 miles long and from 10 to 18 feet high stood out from the plains which had before stretched as level as the sea. On account of its sudden appearance across the old bed of the Indus, the natives gave to this bank the name of Allah Band, or 'God's embankment.' Early observers speak of it as an upheaval of the surface. But from the north side there is little sign of any rise in the land; and a few years after its formation (1826), the flood-waters of the Indus, keeping their former course, forced their way through the dam. These two considerations would seem to show that the apparent height of the bank, as seen from the south, is to some extent due to the fall in the level of the land in that direction.

Cutch is a land of few trees. The *nīm*, *pīpal*, and *babūl* are occasionally found near villages. The tamarind and the banyan are more rare, the mango requires care, and even on the coast the coco-nut is difficult to rear. Of large game, leopards and wild hog are to be found. Of smaller animals, the hare occurs in large numbers. The wild ass (*Equus hemionus*) frequents the wastes of the Rann.

Lying along the parallel line of the tropic of Cancer, Cutch is almost beyond the rain-bringing influence of the south-west monsoon. The annual rainfall at Bhūj for the ten years ending 1903 averaged only 12·6 inches. During this period the greatest amount registered in any one year was 26·5 inches in 1895, and the least 1·4 in 1900. Along the sea-coast, throughout the year, the climate is agreeable; and over the whole tract for nearly nine months it is cool and healthy. But in April and May burning heat and dust-storms prevail, and, again, during October and part of November the heat becomes excessive. In 1903 the temperature attained a maximum of 109° in May, and fell to a minimum of 46° in January.

History.

The earliest historic notices of Cutch are in the Greek writers. The waters of the Rann were known to Alexander (325 B.C.). About 150 years later Cutch was part of Menander's kingdom, and shortly afterwards passed into the hands of the Sakas. To them succeeded the Parthians. Between A.D. 140 and 390 the Kshatrapas of Surāshtra ruled in Cutch. It was included for a time in the Gupta kingdom of Magadha and was ruled later by the Vallabhi kings. In the seventh century Cutch formed part of the province of Sind. Hiuen Tsiang refers to it as K'ie-ch'a. Invasions

of Chārans, Kāthīs, and Chāvadas followed. In the ninth century the Arabs settled on the coast. In 1023 Bhīma Deo I of Anhilvāda fled before Mahmūd of Ghazni to Kandhkot; and at the close of that century the peninsula was overrun by Singhar, the fourth Sūmra ruler of Sind.

The modern history of Cutch may be said to date from its conquest by the Sind tribe of Sammā Rājputs in the fourteenth century. The Sammās fled to Cutch to escape the oppression of the Sūmras. The Chāvada Rājputs, who then ruled over Cutch, granted the Sammās a tract of land; but in time the latter subverted the rule of the Chāvadas, and reigned in their stead (1320). The section of the Sammās forming the ruling family in Cutch were known as the Jādejas, or 'children of Jāda.' When the rest of the Sammā tribe in Lower Sind embraced the orthodox Muhammadan faith, the Jādejas adopted as their religion a mixture of Hinduism and Muhammadanism. This fact has avowedly influenced their history. Isolated from the rest of their tribesmen and unable to obtain suitable husbands for their daughters, they were led to practise wholesale female infanticide, and enjoyed an evil reputation for this habit up to quite recent years.

Till 1540 the Jādejas ruled over Cutch in three branches; but about that year Khengār, the son of Jām Hamīr, with the assistance of the Muhammadan king of Ahmadābād, succeeded in making himself head of the tribe and master of the whole province. He also obtained from the king the grant of Morvi in the north of Kāthiāwār, with the title of Rao. The Jām Rāwal, uncle of Khengār, who had previously ruled over a part of Cutch, fled to Kāthiāwār and founded the present reigning house of Navānagar, the rulers of which are still called Jāms. Under the Ahmadābād kings, Khengār paid no regular tribute; but he was liable for military service with 5,000 horse. When their power waned, Bhārmal, the successor of Khengār, attempted to make himself independent; but after two defeats, in 1590 and 1591, he agreed to admit the supremacy of the Mughal emperor, and was confirmed in his former position. The tribute at first exacted was remitted by the emperor Jahāngīr on condition of his giving pilgrims a passage to Mecca. For six generations after Khengār the Raos succeeded according to primogeniture. On the death of Rāyadhan (1697), his third son Prāgji gained the throne by murder and usurpation. In order to pacify the son of his murdered brother, he placed him in independent charge of Morvi, which is still in the possession of his descendants. After 1718 the viceroy of Gujarāt sent numerous expeditions against Cutch, which were defeated, and the fort of Bhūj was built to repel their attacks. Subsequently a rebellion broke out, and Ghulām Shāh Kalhora, ruler of Sind, taking advantage of the disorders of the State, twice invaded Cutch with some success (1762–5). The disorder became

intensified by the insanity of the Rao and the struggles of rival factions, one of which was headed by the famous minister Fateh Muhammad, until in 1809 the help of the British Government was sought to restore order in the country. It was not considered expedient to interfere with the internal affairs of Cutch, and the treaty then made was chiefly directed to the suppression of piracy and the prevention of raids into Kāthiāwār. The treaty was little regarded; and all remonstrances failing, a British force moved into Cutch in 1815, when a new treaty was made, by which the British undertook to restore order, and Cutch to give compensation, ceding the fort of Anjār and twenty-three other villages. Peace having been restored, the British Government remitted all arrears due from Cutch, in return for which the Rao continued faithful to his alliance. But his debaucheries and cruelty excited the discontent of the Jādeja chiefs, who in 1818 applied for help to the British Government. As the Rao had made preparations for war, troops were moved against him, and Bhūj was captured. The Rao was deposed, and the Jādejas nominated a minor to be his successor, with the British Resident and a few chiefs as a regency. The British Government undertook the maintenance of order without introducing British civil or criminal jurisdiction, and guaranteed the Jādeja chiefs in their possessions. In 1822 the district of Anjār, formerly ceded to the British, was restored to Cutch for a yearly payment. The regency was closed in 1834 on the Rao's coming of age. The Rao of Cutch holds a patent or *sanad* from the British Government authorizing adoption, and in matters of succession the family follows the rule of primogeniture. He is entitled to a salute of 17 guns.

Population.

About the middle of the eighteenth century the population of Cutch is believed to have been considerably greater than it was for many years after. The misgovernment towards the close of the eighteenth century, the wars carried on by Fateh Muhammad, and the famine and pestilence of 1812, are said to have reduced the population by one-half. The enumerations of 1872, 1881, 1891, and 1901 returned the total population of the State at 488,507, 512,084, 558,415, and 488,022 respectively. In the last decade the population decreased by 13 per cent. through famine and plague. The results of the Census of 1901 may be summarized as follows:—Area 7,616 square miles, with 8 towns (Bhūj, Māndvi, Anjār, Mundra, Nalia, Jakhau, Bhachau, and Rapar) and 937 villages; average density of population, 64 persons per square mile. Hindus numbered 305,724, Muhammadans 111,238, Jains 70,467, Pārsīs 91, and Christians 53. About 9 per cent. of the total population are Rājputs and 5 per cent. are Brāhmans, while the cultivating, artisan, and other lower castes of Hindus constitute about 24 per cent. Of the Rājputs and their Bhāyād or 'brethren of the tribe,' the majority are Jādejas. *Satī* and

female infanticide were at one time very prevalent; the first has been suppressed entirely, and efforts for the suppression of the second have been attended with considerable success. In 1842 the proportion of males to females in the Jādeja tribe was found to be as 8 to 1; in 1901 it was about equal. Among the landed proprietors are a few Vāghela Rājputs, who reside in the cultivated spots of the arid country between North-Western Kāthiāwār and Sind. The languages of Cutch are nominally two: Kachchhī (Cutchī) and Gujarātī, the former being a colloquial dialect of Gujarātī little used now in literature or business. Gujarātī is the written language. Persian and Western Hindī are but slightly used or known.

There is a fair proportion of good arable soil in Cutch. As most of it is sandy and easily tilled, holdings are large, averaging 35 acres.

Agriculture.

About 4,342 square miles are occupied for cultivation, of which 50 per cent. were under crop in 1903-4. Wheat and barley of indifferent quality are cultivated, as well as cotton, the ordinary varieties of millet and pulse, and a little garden produce. *Bājra* is of two kinds, small and large. Large *bājra* is sown in middling soils and grows best when the land is slightly salt. *Jowār* is chiefly grown on clay soils. The chief pulse is *korad* (*Phaseolus aconitifolius*). During the decade ending 1903-4 Rs. 95,000 was advanced to cultivators, mostly in the four years ending 1902-3.

The present daily wage of a carpenter or mason is 10 annas and of a labourer 6 annas. During 1903-4 the prices of the chief grains at Bhūj were: *bājra* 29 lb., wheat 26 lb., *jowār* 41 lb. per rupee.

Of domestic animals, the camel is the most important, being famous for its fleetness. The Rao possesses large herds of these animals, as well as of cows and buffaloes. Cutch was long famous for its horses. The increased facility of importing Arab and other horses has much reduced the value of the Cutch breed.

Irrigation is practised over a considerable area. Wells are the chief source, watering 97 square miles. Owing to the porous nature of the upper soil, storage of water in ponds and reservoirs is difficult.

There are scattered forest Reserves in the State, of which the principal produce is grass, the trees grown in them being for the most part thorny, stunted, and of no value for building timber. The forest receipts amounted to Rs. 22,629 in 1903-4, of which Rs. 17,377 was derived from grass. Great efforts have been made to plant trees on roadsides and pasture lands, and rewards have been offered for success in arboriculture.

Both iron and coal are found. Iron was formerly smelted, but at present the Cutch mines remain unworked. Coal seams occur in the Umia beds, but they are too thin to be worked at a profit. Alum and a coarse variety of saltpetre are also produced. In former times alum

was prepared in great quantities; but, partly owing to the competition of Chinese alum, and partly because Cutch alum is said to injure cloth prepared with it, the demand has recently been greatly reduced. It is manufactured at Madh from the pyritous clays or alum shales at the base of the Tertiary. The Karimori hills furnish strong tough mill-stones, and good building stone abounds. Some of the best varieties are furnished by the Lower Jurassic rocks, and others much used are found in the Upper Tertiary beds. A yellowish marble is found at Khāvda and exported.

Trade and communications.

The trade of Cutch is mostly carried by sea. The chief imports are: of raw produce, grain, butter, sugar, groceries, fruit, and timber; and of manufactured articles: iron, brass, and copper-ware, cloth, furniture, stationery, and ivory. The exports are alum and cotton, millet, pulse, garlic, clarified butter, black-coloured cloth, and silver-ware. The Rājputāna-Mālwa Railway is said to have had an injurious effect on the sea-borne trade of Cutch, as traffic is thereby diverted to Bombay and Karāchi. In 1903-4 the imports by sea and land amounted to nearly 91 lakhs, and the exports to 14 lakhs. The customs dues are for the most part collected departmentally; in 1903-4 they realized about 8 lakhs. From Māndvi, the chief port of Cutch, between the middle of August and the middle of June, vessels sail to Arabia, Maskat, Sind, Kāthiāwār, Bombay, and the Malabar coast. The Cutch sloops, called *cotias*, generally built with decks, are esteemed very good sea-boats; and the Cutch sailors, Musalmāns and the Khārva caste of Hindus, are equal to any to be found on the western coast of India, in both skill and daring. Māndvi used at one time to have a close connexion with Zanzibar, on the African coast, from which were imported ivory, rhinoceros hides, and slaves. The importation of slaves into Cutch was stopped in 1836. Transit duties were abolished in 1873. In addition to the beautiful embroidery and silver-work, for which Cutch is chiefly noted, its manufactures of silk and cotton are of some importance. There are three ginning factories and ten cotton-presses in the State, which turned out 7,700 bales in 1903-4.

Owing to the want of made roads, the country becomes almost impassable during the rainy months. But in the fair season there is land communication northwards with the south-east Districts of Sind, with Mārwār, with North Gujarāt, and across the Little Rann with Jhālawār, the north-eastern division of Kāthiāwār. The total length of metalled roads at the end of 1903-4 was 165 miles, and of unmetalled 19 miles, while avenues of trees are maintained on 25 miles. The principal roads are those from Bhūj to Mandoī, from Bhūj to Khari Rohar, and from Bhūj to Mundwar. There is at present no railway communication in the State; but one proposal under discussion is

to connect Wadhwān with Hyderābād through the Rao's territory, and the northern section of this line is already complete as far as Badin. An alternative alignment to the north of the Rann has also been proposed. A State line from the port of Tuna to Bhūj via Anjār is under construction. The number of post offices in the State was 110 in 1904, of which 11 were combined post and telegraph. The length of the Cutch State telegraph line is 230 miles.

Famine.

Of the early famines in Cutch little is known. In 1577 the State passed through a time of much distress. During the latter half of the eighteenth century there were seven famine years, 1746, 1757, 1766, 1774, 1782, 1784, and 1791. The famine of 1746 was very severe. In 1813 came the fiercest and most destructive famine, when many sold their children for food. A cat or dog was a delicacy and even human flesh was eaten. Since then until 1899 there have been at least fifteen years of severe scarcity. In two distress was due to the damage to the crops by locusts, in two to destruction done by rats, and in the others to capricious rainfall. In 1899-1900 the State suffered from famine owing to the short rainfall, which was only 2 inches, or one-sixth of the average. Relief works were organized, the daily number of persons employed on them rising to 49,022. The total cost of these works exceeded 24 lakhs, and Rs. 3,755 contributed by the Bombay Relief Committee was distributed in charitable relief.

Administration.

The territory of Cutch has various jurisdictions: the first comprises the State (*khālsa*) portion, under the direct management of the Rao; the second, the estates of the Bhāyād, or cadets of the Rao's house, a body of feudal landlords; the third jurisdiction is that over seven villages in the centre of the territory, known as the Adhoi subdivision, which belongs to the Thākur of Morvi in Kāthiāwār; the fourth is that of the Jādeja court, presided over by a British officer, for the trial of cases assigned to it under the settlement of 1875. For administrative purposes the State is divided into eight districts: namely, Abdāsa with Nakhtarāna, Anjār, Bachau, Bhūj with Khāvda, Lakhpat, Māndvi, Mundra, and Rāpar with Khadir.

The *Varishta Adālat* exercises full civil and criminal jurisdiction throughout the State, sentences of death and transportation for life and fourteen years' imprisonment being subject to confirmation by the Rao. The State contains 53 civil and 45 criminal courts, divided into three classes: those with jurisdiction in the Rao's domain only, those with jurisdiction in the estates of petty chiefs, and those whose power extends over the whole of the State. They include a special institution styled the Jādeja court, under the presidency of the Naib Dīwān, which consists of a bench of four Jādeja nobles, members of the Bhāyād chosen by the Rao. This court owes its origin to the settle-

ment of 1875 which made good the guarantee granted by the British Government to the Jādeja chiefs under the terms of the treaty of 1819. It hears civil and criminal cases arising both in the estates of the guarantee holders and beyond these. Since 1869 civil and criminal procedure codes have been introduced on the model of those in use in British territory. The commonest forms of crime are petty thefts and hurt, varied by occasional robberies.

The total revenue of the State, including that of the Bhāyād and other petty chiefs, is estimated at 36 lakhs, of which 19 lakhs belong to the Darbar and the balance to the *zamīndārs* and others. The chief sources in 1903–4 were customs (8 lakhs) and land revenue (6 lakhs), while recoveries of outstanding revenue contributed 2 lakhs, *sayar* and interest on invested capital one lakh each, stamps and excise Rs. 6,500 each, and miscellaneous revenue Rs. 30,000. The chief items of expenditure, which amounts annually to about 25 lakhs, are the tribute to the British Government (Rs. 1,86,950) for the maintenance of a British subsidiary force, the expenses of the Rao (1·2 lakhs), police (1·3 lakhs), revenue and customs (1·5 lakhs), exchange (2 lakhs), and advances (15 lakhs). The surplus revenue is invested in Government securities and in the purchase of *girās* lands in the State. There is a mint which coins *panchias* (=Rs. 1–5), *koris* (=4 annas), and half-*koris*, which represent the ordinary currency of the State. The mint at present does not work at a profit, owing to the unusually high rates of *hundis*, or bills of exchange.

The revenue system is *bhāgbatai*, or rent in kind, the State share, which varies from one-seventh to one-third of the produce, being sold by auction. A high value is set upon the right of occupancy, but in *girāsiā* villages the cultivators are tenants-at-will. In State lands the right of occupancy is accorded only to those who have proved themselves worthy of the concession by sinking wells or converting 'dry crop' into garden land. The revenue survey, introduced in 1873 and as yet incomplete, was on measurement only and not on classification or assessment of the lands. The land revenue was formerly farmed out each year, but since 1878 it has been collected by the Darbār officials.

A notable fact in connexion with the administration of the Cutch State is the number and position of the Bhāyād. These are Rājput nobles forming the brotherhood of the Rao. They were granted a share in the territories of the ruling chief as provision for their maintenance, and are bound to furnish troops on an emergency. The number of these chiefs is 137, and the total number of the Jādeja tribe in Cutch is about 16,000. There have been several dissensions between the Rao and his Bhāyād, in which the British Government has mediated, guaranteeing to the latter enjoyment of their possessions. Their

estates do not descend according to primogeniture, but a system of subdivision prevails. The aggregate income of the Bhāyād is estimated at about 17 lakhs. Some of them are invested with the power of trying civil and criminal suits. The residuary jurisdiction is vested in the Darbār and is exercised through the Jādeja court.

There are four municipalities in the State, of which the principal are BHŪJ, MĀNDVI, and ANJĀR. Their total income in 1903–4 amounted to Rs. 28,000.

The outlay on public works during the ten years ending 1903–4 was 17 lakhs, exclusive of 24 lakhs expended upon relief works during the famine of 1900, the chief works being the improvement of Māndvi harbour, and the construction of roads to connect Bhūj with Abdāsa, Mundra, and Wagad in the eastern portion of the State. Nearly 2 lakhs was spent in 1903–4 on the Anjār-Tuna railway and roads.

The State is by treaty bound to defray the actual expenses of the subsidiary force stationed at Bhūj for the protection of the country, to the extent of 2 lakhs annually. The military force consists of 254 cavalry and 853 foot soldiers, including 281 Arabs. In addition there are some irregular infantry, and the Bhāyād could furnish on requisition a mixed force of about 4,000 men. The police force numbers 244 mounted and 572 foot. There are 12 prisons, with accommodation for 2,243 prisoners. The total prison population in 1903–4 was 1,855.

Of the total population, 8 per cent. (15·9 males and 1·2 females) could read and write in 1901. Education is sadly neglected among the Bhāyād, but a steady progress is observable. In 1881–2 there were 66 recognized schools in the State, with a total attendance of 5,342. The State schools comprise one high school, 6 Anglo-vernacular schools, 96 lower schools, 14 girls' schools (with 718 pupils), 10 night schools, one school of art, and one Sanskrit *pāthsāla*. The number of pupils in 1903–4 was 5,794 in the 129 State schools, and 128 private indigenous schools had an aggregate attendance of 5,064. The expenditure on education was Rs. 62,588. The State awards 98 scholarships, of which 57 are assigned to female students. The number of pupils at the Bhūj school of art is 156.

At the 11 hospitals and dispensaries in the State more than 100,000 persons were treated in 1903–4 at a total cost of Rs. 34,000. The lunatic asylum contained 9 inmates in the same year, and the number of persons successfully vaccinated was 31 per 1,000.

[Sir J. M. Campbell, *Bombay Gazetteer*, vol. v.]

Cutch, Rann of (Sanskrit, *Irina*).—A salt waste lying between 22° 55′ and 24° 43′ N. and 68° 45′ and 71° 46′ E., covering an area of about 9,000 square miles, and stretching along the north and east of the State of CUTCH, which it separates from Sind on the north and from

Rādhanpur and Kāthiāwār on the east and south. It varies in width from 25 to 35 miles on the north to 2 miles on the east. It is believed to be the bed of an arm of the sea, raised by some natural convulsion above its original level, and cut off from the ocean. It was a navigable lake in Alexander's time (325 B.C.) and a shallow lagoon at the date of the *Periplus* (third century A.D.), and there are local traditions of sea-ports on its borders. Geologically, it is of recent formation. The northern or larger Rann—measuring from east to west about 160 miles, and from north to south about 80—has an estimated area of not less than 7,000 square miles. The eastern or smaller Rann (about 70 miles from east to west), which is connected with the larger Rann by a narrow channel, covers an area estimated at nearly 2,000 square miles. Between March and October, when the whole tract is frequently inundated, the passage across is a work of great labour, and often of considerable danger. Some of this inundation is salt water, either driven by strong south winds up the Lakhpat river from the sea, or brought down by brackish streams; the rest is fresh, the drainage of the local rainfall. The flood-waters, as they dry, leave a hard, flat surface, covered with stone, shingle, and salt. As the summer wears on, and the heat increases, the ground, baked and blistered by the sun, shines over large tracts of salt with dazzling whiteness, the distance dimmed and distorted by an increasing mirage. On some raised plots of rocky land water is found, and only near water is there any vegetation. Except a stray bird, a herd of wild asses, antelope, or an occasional caravan, no sign of life breaks the desolate loneliness. Unseasonable rain, or a violent south-west wind at any period, renders the greater part of the Rann impassable. Owing to the effects of an earthquake in 1819 the Greater Rann is considerably higher in the centre than along the edges; while the centre, therefore, is dry, there are frequently water and mud at its sides. The Little Rann is at present undergoing a marked change. Year by year the sea is spreading farther eastward; and, along the coast, places which a few years ago were inaccessible to boats are now open to water traffic. There is a considerable manufacture of salt at KHĀRĀGHODA, the salt produced here being styled Barāgara salt, a name derived from the character of the soil.

Cuttack District.—District in the Orissa Division of Bengal, lying between 20° 2′ and 21° 10′ N. and 85° 20′ and 87° 1′ E., with an area of 3,654[1] square miles. It is bounded on the north by the Baitaranī river and Dhāmra estuary, which separate it from Balasore District; on the east by the Bay of Bengal; on the south by Purī; and on the west by the Tributary States of Orissa.

[1] The area shown in the *Census Report* of 1901 was 3,629 square miles. The area given above is that now reported by the Surveyor-General.

Physical aspects.

Cuttack consists of three distinct tracts: the first is a marshy jungle-covered strip along the coast, from 3 to 30 miles in breadth; the second is an intermediate arable tract of rice land in the older part of the Mahānadī delta; and the third is a broken hilly region along the western boundary. The marshy strip on the coast resembles the Sundarbans as regards its swamps, dense jungle, and noxious climate, but lacks the noble forest scenery of the Gangetic tract; it is intersected by innumerable streams and creeks, whose sluggish waters deposit their silt, and form morasses and quicksands. The arable plains stretch inland for about 40 miles, and are intersected by the large rivers that emerge from the western mountains and throw out in every direction a network of branches, which, after innumerable twists and interlacings, frequently rejoin the parent stream as it approaches the sea. The third tract consists of a series of ranges, seldom exceeding 10 to 15 miles in length, with thickly wooded slopes and lovely valleys between. Elsewhere only a few isolated hills break the evenness of the plains. The chief of these are NALTIGIRI with its sandal-trees and Buddhist remains; UDAYAGIRI with its colossal image of Buddha, sacred reservoir, and ruined temples and caves; and ASSIA, the highest point in the District (2,500 feet), with its old mosque. The MAHĀVINYAKA peak has for ages been consecrated to the worship of Siva.

The rivers, however, constitute the conspicuous feature of Cuttack. These issue in three magnificent streams through the mountainous frontier on the west. In the extreme north the sacred BAITARANĪ, the Styx of the Hindus, emerges from Keonjhar State in which it takes its rise, and forms the boundary between Cuttack and Balasore. In the south the MAHĀNADĪ or 'great river' pours down upon the delta from between two hills at Narāj, about 7 miles west of Cuttack city, where its stream is contracted to a mile in breadth. About half-way between the two the Brāhmanī enters the District. These rivers, whose upper channels dwindle during the cold season to insignificant streams dotted here and there with stagnant pools, bring down after heavy rains an enormous mass of water from the table-lands in which they take their rise. Towards the coast they gradually converge, and their accumulated waters rush down within 30 miles of each other upon the level plain, with the result that the beds are altogether inadequate to carry off the floods, which burst over the banks and sweep across the country. After innumerable bifurcations the three rivers enter the sea by various mouths. The Baitaranī and the Brāhmanī meet before they reach the sea, and the combined stream flows into the Bay of Bengal at Point Palmyras under the name of the Dhāmra. The Mahānadī after many interlacings forms two great estuaries: one generally known as the Devī, which enters the Bay at the south-eastern corner of the District, and

the other bearing the name of the parent river, the Mahānadī, which empties itself into the sea at False Point, about half-way down the coast. Each of these great rivers throws off, on its way through the District, a number of distributaries, those of the Mahānadī being the most numerous and important. The chief offshoots of the Mahānadī are the Kātjurī, Paikā, Birūpā, and Chitartala. The Brāhmanī receives, a little above its junction with the Baitaranī, an important tributary, the Kharsuā, which is itself an offshoot of the Brāhmanī.

To the south of the Brāhmanī river as far east as the Ulti *pargana* numerous gneissic hills are scattered over the country. For some miles the gneiss is compact, but farther south it assumes a peculiar more or less decomposed form, marked by numerous red blotches, the remains of disintegrated garnets. This form of gneiss is occasionally quarried for various purposes, its softness rendering it easy to work. The estate of Bānki contains some fine hills, the main peaks running in a semicircle from near Bānkīgarh to the village of Baideswar. These are partly of garnetiferous gneiss like those mentioned above, and partly of more compact and hornblendic rock. A large undulating plain to the south is partly covered with laterite, through which the gneiss rises at intervals. The hills near the Mahānadī west and south-west of Cuttack are formed of coarse grits, sandstones, and conglomerates, with subordinate white or pinkish clay belonging to the Gondwāna system[1].

In the Mahānadī delta swampy places on the banks of rivers and creeks near the sea have the vegetation of a mangrove forest. Where sand-dunes intervene between the sea and the cultivated land behind, an equally characteristic littoral vegetation is met with, the principal species being *Spinifex*, *Hydrophylax*, and *Geniosporum prostratum*. The cultivated land bears the usual rice-field weeds, while ponds and ditches are filled with floating water-weeds or submerged water-plants. Near human habitations shrubberies of semi-spontaneous origin are common. This undergrowth is loaded with a tangled mass of climbing *Convolvulaceae*. The arborescent portion of the village shrubberies includes the red cotton-tree (*Bombax malabaricum*), *jiyal* (*Odina Wodier*), *Tamarindus indica*, *Moringa pterygosperma*, *pīpal* (*Ficus religiosa*), banyan (*Ficus bengalensis*), and the palms *tāri* (*Borassus flabellifer*) and *khajur* (*Phoenix sylvestris*). There are no forests; but in the north-west especially are found other species of a more truly forest character, among them being *Ailanthus excelsa*, *Pterocarpus Marsupium*, *Pterospermum Heyneanum*, *Dalbergia paniculata* and *D. lanceolaria*, *Adina cordifolia*, *Schleichera trijuga*, and the like. The usual bamboo is

1 *Memoirs, Geological Survey of India*, vol. i, part iii, 'On the Geological Structure and Physical Features of the Districts of Bānkurā, Midnapore, and Orissa'; and *Records, Geological Survey of India*, vol. v, 'Sketch of the Geology of Orissa,' by W. T. Blanford.

Bambusa arundinacea. Open glades are filled with grasses, sometimes of a reedy character. Sedges are abundant and ferns are fairly plentiful.

Tigers, bears, leopards, wild buffaloes, antelope, spotted deer, hog deer, hyenas, jackals, foxes, and wild hog are found. Fish-eating and man-eating crocodiles abound in all the rivers and creeks, and grow to a very large size. Comparatively little loss of life is caused by tigers and leopards, as these animals are confined chiefly to the dense jungles on the coast, or to the hilly portion of the District, where the population is sparse and where deer and hog supply them with sufficient food.

The District is directly on the track of the cyclonic storms which cross Orissa frequently during the monsoon season, and the extremes of climate are more marked than in most other parts of Bengal. In April and May the average maximum temperature is 102°. The mean temperature falls from 88° in the hot months to 83° in the monsoon season and to 69° in February. Owing to the occasional dry westerly winds in the hot season and to the later well-marked south-west monsoon conditions, humidity undergoes considerable variation, ranging on an average from 72 per cent. in April and May to 83 per cent. in August. The annual rainfall averages 60 inches, of which 4·6 inches fall in May, 9·9 in June, 11·7 in July, 12·3 in August, 10·3 in September, and 5·8 in October. Cyclonic storms occasionally occur in the north of the Bay in May, and with these storms weather of the south-west monsoon type prevails over the whole of Orissa.

The Orissa coast is not ordinarily liable to suffer from cyclones, which usually move towards the Arakan or Bengal coast. But in recent years several severe cyclones have been experienced, the most notable being that of September 23, 1885, which was accompanied by a storm-wave that caused much loss of life and property near the coast. In the Kendrāpāra subdivision alone 5,000 lives were reported to have been lost, while serious damage was caused to crops and houses. The Kanikā estate, which includes a considerable part of the affected sea-board, suffered most severely and many villages then destroyed have not since been inhabited. The salt deposited on the lands by the tidal wave affected the crops for about five years. As already stated, floods often occur, owing to the large volume of water brought down by the rivers during heavy rains. These cause much damage to crops and sometimes also to houses; and on the occasion of eight such floods, which occurred between 1831 and 1867, remissions of revenue were granted amounting to 8 lakhs. The canal system, which includes a number of high embankments serving the double purpose of protecting the irrigation works and the enclosed country from the action of floods, was opened in 1868; and since that year no remissions of land revenue have been necessary. The canal embankments, however, by

contracting the spill channels have increased the liability of the low unembanked tracts to floods, and the problem of protecting the crops of these areas from periodical loss is still unsolved.

History.

The District has no separate history, apart from that which will be found in the article on ORISSA. The city of CUTTACK possesses a special importance as having been for upwards of a thousand years the capital of the province. The ruins of a fort still stand at CHATIĀ, and other interesting archaeological remains exist at NALTIGIRI and UDAYAGIRI.

Population.

The population increased from 1,544,210 in 1872 to 1,795,065 in 1881, to 1,937,671 in 1891, and to 2,062,758 in 1901. The Census of 1872 was doubtless inaccurate, but a large part of the recorded growth between that date and 1881 was due to the recovery of the District from the terrible famine of 1866. The progress in the next decade would have been greater but for the cyclone of 1885. The District is healthy and comparatively free from malaria, but suffers from occasional epidemics of cholera. The chief statistics of the Census of 1901 are given below :—

Subdivision.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Cuttack	1,562	1	2,599	1,035,275	663	+ 5·4	79,876
Kendrāpāra	977	1	1,338	467,081	478	+ 8·7	36,135
Jājpur	1,115	1	1,580	560,402	503	+ 6·6	43,075
District total	3,654	3	5,517	2,062,758	565	+ 6·5	159,086

The towns are CUTTACK, the head-quarters, JĀJPUR, and KENDRĀPĀRA. The population is sparse on the lower slopes of the hills and also on the sea-coast; but between these two extremes the population is dense, rising in Sālīpur *thāna* to 933 persons per square mile, whereas Aul on the sea-coast has only 298, and the hilly Bānki 377. There is a large emigration to the sparsely inhabited Native States to the west, and to the neighbouring Districts of Balasore and Purī. Numbers go to the metropolitan Districts, where they serve as palanquin bearers, doorkeepers, and labourers. Natives of Cuttack are also found as cooks and domestic servants throughout Bengal, and as cultivators and field-labourers in the Sundarbans, while many have emigrated to Assam and the United Provinces. The language of the District is Oriyā. Hindus number 2,002,573, or 97 per cent. of the total, and Musalmāns 57,356, or 2·8 per cent.

The chief castes are Brāhmans (195,000), Khandaits (375,000), Chāsas (266,000), Gauras (140,000), Kāndras (92,000), and Pāns

(103,000). The Khandaits and Chāsas are practically confined to Orissa; these castes, between whom there is but a thin line of separation, often overstepped by the accession of wealth, are almost entirely agricultural. The Gauras are the herdsmen of Orissa, while the Kāndras are a low caste who in former days with the Pāns formed the rank and file of the local militia; they are now usually day-labourers or village *chaukīdārs*. Agriculture supports 58·5 per cent. of the population, industries 18·3 per cent., and the professions 2·6 per cent.

Of 2,652 Christians (1901) 2,204 are natives. Most of these are the adherents of a Baptist mission which has been at work since 1822, and which now employs 8 missionaries and 3 evangelists. It maintains a high school affiliated to the Calcutta University, a European high school, an orphanage for boys and girls, and a printing press. A Roman Catholic mission founded in 1845 maintains in Cuttack city a chapel, a church, a convent, and a boys' school. The Catholic community number about 400, including (1901) 161 Europeans and Eurasians.

Agriculture.

The low-lying tract along the sea-shore is of great natural fertility where protected from the action of the salt water. A great part, however, is unprotected and unfit for cultivation, and much of the rest is exposed to damage from storm-waves. In the rocky tract along the west the soil is barren. Between these two extremes lies a fertile and highly cultivated alluvial plain, watered by the three great rivers and protected from drought by an extensive system of irrigation; its soil consists of a mixture of sand and clay in varying proportions.

The principal agricultural statistics for 1903-4 are shown below, areas being in square miles:—

Subdivision.	Total.	Cultivated.	Cultivable waste.	Irrigated from canals.
Cuttack . . .	1,562	805	62	170
Kendrāpāra . .	977	512	137	47
Jājpur . . .	1,115	586	43	50
Total	3,654	1,903	242	267

Rice is the staple food-grain, covering 1,870 square miles. It is grown in three distinct ways: namely, *sārad*, or winter rice, sown at the beginning of the monsoon and reaped in the winter season; *biāli*, or autumn rice, sown a month earlier and harvested about the beginning of September; and *dālua*, or spring rice, sown at the commencement of the cold season and harvested in March. The winter rice, which is raised on 1,566 square miles, is by far the most important kind. After rice, the people depend mostly on pulses sown in the autumn and harvested from January to April; these cover 161 square miles, the

commonest being *kulthi*, *bīrhi*, *mūng*, and *rahar*. Oilseeds occupy 55 square miles, while *maruā*, sugar-cane, tobacco, potatoes, and betel-leaf are also grown.

Cultivation is steadily extending with the growth of the population; but in some parts of the intermediate belt there is very little cultivable land left for reclamation, and the pressure of the population on the soil has almost reached the maximum limit. About Rs. 39,000 was advanced under the Agriculturists' Loans Act in 1896-8, but ordinarily little recourse is had to such loans.

The cattle are similar to those found in the southern Districts of Lower Bengal. Cattle of a superior breed, resulting from the introduction of up-country bulls, may be seen here and there in towns and to a small extent in some rural areas. Sheep of a small size are bred throughout the District. Pasture-grounds abound along the seaboard and in the hilly region, but elsewhere cultivation has encroached on the grazing-grounds; except along the seaboard, the ground retains little moisture during the hot season. Rinderpest and foot-and-mouth disease are somewhat prevalent.

The greater part of the ORISSA CANALS system lies within the District. The Māchgaon canal leaves the Tāldanda canal 7 miles south of Cuttack city, and runs along the north bank of the Kātjurī and of its branch the Alankā for a distance of 32 miles. It has a discharge of 776 cubic feet per second and commands about 152 square miles. The Tāldanda canal starts from the right bank of the Mahānadī immediately above the anicut, and runs in a south-eastern direction to Birābati, where it gives off the Māchgaon branch. Thence it runs along the southern bank of the Sukpaikā and the Mahānadī for a total length of 52 miles. It has a discharge of 1,342 cubic feet per second, of which about half is taken off by the Māchgaon canal, and it commands 117 square miles. The Kendrāpāra canal has a total length of 39 miles and a discharge of 1,067 cubic feet per second. The area commanded by it is 169 square miles, and its 23 distributaries are capable of watering 152 square miles. Its branch, the Gobri canal, has a total length of 15 miles and commands 33 square miles, but the distributaries constructed can irrigate only 14 square miles. The Gobri extension is only 6 miles long, but commands an area of 50 square miles, of which, however, only 12 square miles can be irrigated by the distributaries constructed. The Patāmundai canal, branching off from the Kendrāpāra canal just below the Birūpā head-works, skirts the southern bank of that river and of the Brāhmanī for a total length of 47 miles. It has a discharge of 885 cubic feet per second and commands an area of 80 square miles, its distributaries being capable of irrigating 69 square miles. The High-level Canal forms part of the original scheme for connecting Purī with Calcutta. It consists of three

ranges, of which the first and the second, covering a total distance of $45\frac{1}{2}$ miles, lie in this District. It is very picturesque, skirting the base of the wooded hills along the western boundary. The two ranges command an aggregate area of 92 square miles, of which, however, only a small proportion is actually irrigated. The Jājpur canal, starting from the head-works at the point of bifurcation of the Baitaranī, runs for $6\frac{1}{2}$ miles to the town of Jājpur. It has a discharge of 7,000 cubic feet per second and commands 109 square miles. The total area irrigated from Government canals in 1903–4 was 267 square miles, practically all under rice. The rainfall is usually ample, and the value of canal-irrigation lies less in the improvement which it may render possible in the out-turn of an ordinary year than in the protection which it affords against a failure or partial failure in years of drought. Well-water is used only for garden crops and betel plantations. No tanks or other private works are used in ordinary seasons, but in times of drought the winter rice crop is irrigated from all available natural and artificial reservoirs; possibly one-eighth of the crop may be saved by these means.

Sandstone, laterite, and rubble are quarried from the hills in the western borders, but only for the railway and local use. The soft decomposing gneiss is used for building purposes.

Trade and communications.

The silver filigree work of Cuttack city is well-known. Cotton-weaving is extensively carried on, and other manufactures are bell-metal work, lac and brass ornaments, pottery, hardware, gunny-bags, and baskets; neat toys and sticks are turned from buffalo horn, deer horn, and ivory, and are largely bought by the pilgrims who pass through the District. The other hand industries are of the primitive description found in most parts of Bengal.

The chief exports are rice to Calcutta, Mauritius, and Ceylon; oilseeds, hides, jute, timber, horns, lac, nux-vomica, beeswax, resin, and silver filigree work to Calcutta; and bones to Calcutta and Ganjām. The chief imports are piece-goods, kerosene oil, crockery, glass-ware, fancy goods, metals, yarn, betel-nuts, and spices from Calcutta; salt from Calcutta and the Madras Presidency; jungle products, grain, and oilseeds from the Tributary States and the Central Provinces; and spices and condiments from Ganjām. The local trade is mainly in the hands of the Baniyā, Teli, Kewat, Guriā, Pātra, and Golā castes. The chief trade centres are Cuttack city, False Point port, and Chāndbāli, which is situated just outside the District. In 1903–4 the exports by sea from False Point port were 21 lakhs and the imports Rs. 6,000; practically the whole of this was foreign trade.

The Cuttack-Midnapore extension of the Bengal-Nāgpur Railway intersects the District from north to south. The Orissa trunk road

from Calcutta to Ganjām and the roads from Cuttack to Purī and Sambalpur are maintained from Provincial funds, their total length in the District being 61½ miles. In addition to these, 32 miles of metalled and 732 miles of unmetalled roads, including 382 miles of village tracks, were maintained in 1903-4 by the District board, the most important being those from Cuttack city to Tāldanda, Māchgaon, and Chāndbāli, and from Phulnākhrā to Mādhab. Feeder-roads from the interior to stations on the railway are being gradually constructed with the help of Government grants.

The rivers almost dry up in the hot season in the upper reaches, while during heavy floods they become too dangerous for navigation. The anicuts constructed across them have also cut off direct communication from the upper to the lower reaches. The Mahānadī affords unobstructed communication above the anicut with Sambalpur, from which grain is brought down by boats during the rains; but the traffic has been diminishing since the opening up of Sambalpur by railway. In the lower tidal reaches boats are largely used. The Tāldanda, Kendrāpāra, Gobri, High-level, and Jājpur canals are navigable, but their traffic has declined since the opening of the railway.

Steamers carrying passengers and goods ply three times a week from Cuttack city to Chāndbāli port by canal, and from Chāndbāli to Calcutta by sea. Cargo steamers call at False Point at irregular intervals.

Famine.

The crops are liable in unprotected areas to loss from deficient or unevenly distributed rainfall, and from the uncontrolled river-floods. The Bengal famine of 1770 was grievously felt in Orissa, but in recent times the great famine of 1865-67 is the only one comparable with that calamity. The rainfall of 1865 was scanty and ceased prematurely, so that the out-turn of the crop of winter rice, on which the population mainly depends, was reckoned at less than a third of the average. The gravity of the occasion was not perceived, and no special inquiries were instituted, while prices long remained so moderate that they offered no temptation to importers and forced no reduction in consumption on the inhabitants, till suddenly the province was found to be almost bare of food. In May, 1866, it was discovered that the markets were so empty that the jail prisoners and the Government establishments could not be supplied. But the southern monsoon had now begun, and importation by sea or land became nearly impossible. Orissa was at that time almost isolated from the rest of India; the only road, leading to Calcutta across a country intersected by large rivers and liable to inundation, was unmetalled and unbridged; and there was very little communication by sea. By great exertions, the Government succeeded in importing about 10,000 tons of grain by the end of November; and this was given away gratuitously, or sold at low rates, or distributed in wages

to the starving population. But meanwhile the mortality among those whom this relief did not reach, or reached too late, had been very great; and it was estimated that more than 100,000 persons had died. Though the general famine may be said to have come to an end in November, when the new crop began to come into the market, great distress still continued in some parts of the country. The rainfall of the year was so heavy as to cause floods in the Mahānadī river, and while the harvests in the higher lands were excellent, in all the low lands the inundations drowned the crop. Half the District was thus devastated; in January, 1867, forty deaths a day from starvation were reported; and the work of relief had to be taken up again. Altogether about 40,000 tons of rice were imported and lavishly distributed; and about half had been disposed of, when the monsoon of 1867, followed by an unusually fine harvest, altogether put an end to the famine in 1868. No complete statistics of the numbers relieved and of the expenditure incurred are available; but the mortality was estimated at one-fifth to one-fourth of the population, and altogether nearly $1\frac{1}{2}$ crores was expended in Orissa during this famine. Owing to the protection afforded by the irrigation works, no famine has occurred since.

For administrative purposes the District is divided into three subdivisions, with head-quarters at CUTTACK CITY, KENDRĀPĀRA, and JĀJPUR.

Administration.

The Magistrate-Collector is ordinarily assisted at Cuttack by six Deputy-Magistrate-Collectors, a Sub-Deputy-Collector, and occasionally a Joint-Magistrate. The Kendrāpāra and Jājpur subdivisions are in charge of Deputy-Magistrate-Collectors, a Sub-Deputy-Collector being occasionally deputed to help them. A *tahsīl kacheri* at Bānki, the head-quarters of the Government estate of that name, is in charge of a Sub-Deputy-Collector. Three Executive Engineers of the Public Works department are also employed within the District. In addition to the revenue staff mentioned above, a Deputy-Collector with certificate powers is engaged in the collection of water rates under the supervision of the Superintending Engineer of the Orissa Circle.

The jurisdiction of the District and Sessions Judge extends also over Purī and Balasore Districts. Subordinate to him for civil cases is a staff consisting of a Sub-Judge at Cuttack with jurisdiction over Purī and Balasore Districts also, and four Munsifs, of whom two are stationed at Cuttack and one each at Kendrāpāra and Jājpur; additional Munsifs are posted to these stations when necessary. In addition to the court of the District Magistrate, all the above-mentioned magistrates, except a Deputy-Collector in charge of excise and income-tax, exercise magisterial powers. The District is singularly free from serious crime; the commonest offences are burglary and petty theft. In the early days of British administration Cuttack had an unenviable reputation

for the number of murders committed; dacoities and cattle-stealing on a large scale were common; and several cases of *satī* occurred annually.

The early Hindu rulers of Orissa recognized no middlemen between them and their subjects, and every cultivator was in theory bound to pay to his sovereign a share of the produce of his land. The nominal proportion was one-sixth, but in fact it widely varied and was often much more. The residents of each village paid their quota through a headman (*padhān*), who in consideration of the trouble of collection was allowed to hold a certain area rent-free. The village accounts were checked by an accountant called *bhoi*, who likewise was paid by a grant of land. The villages were grouped into large divisions of 10 to 50 square miles, each of which was called a *khand* or *bisi*, the prototype of the later Muhammadan *pargana*. Each division had an executive head, called *khandpati*, who with the divisional accountant, called *bhoimūl* or *bishayī*, collected the revenue and handed it over to the head of the District, called *desādhipati*. The *khandpatis* and *bhoimūls* of the Hindu period became respectively the *chaudhris* and *kānungos* of the Muhammadan period. The village headman's designation was also changed to *mukaddam*, an Arabic term meaning 'headman.' In early times every office had a tendency to become hereditary, and consequently the offices of the *chaudhris* and *kānungos*, originally created for administrative purposes, gradually became quasi-hereditary tenures. The British Government put the final seal upon the proprietary character of the tenures by recognizing the occupants as the actual owners of the soil.

The *pargana* officials widely exercised the rights of gift and sale, and an enormous number of rent-free and rent-paying tenures were thus created. Some of the rent-free tenures were confirmed as such in the first regular settlement of the District, while the rest were resumed and either admitted to direct engagement with Government or left as dependent tenures in the parent estates, according to their size. Of the rent-paying tenures some had received the right of direct payment before the British conquest, while others remained included in the parent estates as dependent tenures; some of the *mukaddami* tenures also had been separated from the parent estates and admitted to direct engagement. The British Government confirmed as proprietors all those who were paying revenue direct into the state treasury. The tenures peculiar to Orissa include *mukaddami* and *sarbarāhkāri* holdings, which are intermediate proprietary holdings held on payment to the *zamīndār* of a rent fixed for the term of the settlement; the *lākhirāj bāzyāfti* is a resumed revenue-free tenure, and the *kharidā jamābandi* a holding of land originally purchased as waste subject to payment of rent.

The British conquest of the District was followed by a series of short-term summary settlements which ended in 1837, when the first regular settlement was undertaken. At first made only for thirty years, that settlement was subsequently extended, owing to the great famine of 1865–7, for a further term of thirty years which expired in 1897. At the settlement for thirty years then effected the revenue demand from temporarily settled estates was raised from 7·14 to 10·99 lakhs. In a large number of estates the increases were imposed gradually, and the figure given above is the final revenue that will be payable from 1908. In 1903–4 the total current land revenue demand was 12 lakhs, of which Rs. 81,000 was payable by 13 permanently settled estates, 10·78 lakhs by 4,684 temporarily settled estates, and the balance by 7 estates held direct by Government. At the last settlement the average size of each holding was 1·26 acres, but a tenant often has more than one holding, and the average area held by each agricultural family is about 3·23 acres. The rent paid by the cultivator varies widely according to the quality of the soil. Good land growing tobacco and other valuable crops pays from Rs. 12 to Rs. 25 per acre, while inferior land producing a coarse pulse sometimes pays less than R. 1. The cultivators are broadly divided into two groups, *thānī* and *pāhī* ryots. *Thānī* is a corruption of *sthānī* or *sthānīya*, literally 'local,' and the term was originally applied to every resident cultivator of a village. Its use is now restricted to the successors in interest of ancient resident ryots who were recorded as such in the first regular settlement of the District. All *thānī* ryots have occupancy rights under the Bengal Tenancy Act, and they pay no rent for their homesteads. *Pāhī* ryots have not these special privileges, but they can acquire occupancy rights under the Bengal Tenancy Act. Neither class of ryots can transfer their holdings without the landlord's consent. The prevailing system of produce rent is called *dhuli-bhāg* ('dust-share') from the fact that the entire produce, including the straw, is shared equally between the landlord and tenant. When a fixed quantity of grain is taken as rent it is called *sanjā*. In both cases the cultivator pays the whole cost of cultivation.

The following table shows the collections of land revenue and of total revenue (principal heads only), in thousands of rupees :—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	9,88	8,87	11,69	12,25
Total revenue . .	14,30	14,61	19,71	20,48

Outside the municipalities of CUTTACK, JĀJPUR, and KENDRĀPĀRA, local affairs are managed by the District board, to which subdivisional local boards are subordinate. In 1903–4 its income was Rs. 1,72,000,

of which Rs. 74,000 was derived from rates; and the expenditure was Rs. 1,44,000, including Rs. 67,000 spent on public works and Rs. 54,000 on education.

Mention has been made of the chief roads and canals. In addition to these, the embankments of the District are of considerable importance. From time immemorial certain tracts have been protected from inundation by embankments, and under British rule this protection has been systematized; large sums have been expended on the perfecting of the embankments, especially after the disastrous floods and famines of 1865-6. The law on the subject is contained in Act III of 1855. In 1904 about 480 miles of embankments were maintained by Government, 265 miles in connexion with the canals, and 215 miles along the banks of the large rivers. A lighthouse is situated at False Point.

The District contains (1904) 10 police stations and 14 outposts. The force subordinate to the District Superintendent consists of 4 inspectors, 38 sub-inspectors, 41 head constables, and 489 constables; there is, in addition, a rural police force of 360 *daffadārs* and 3,585 *chaukīdārs*. The District jail at Cuttack has accommodation for 409 prisoners, and subsidiary jails at Jājpur and Kendrāpāra for 12 each.

In 1901, 7·7 per cent. of the population (15 males and 0·5 females) could read and write. The number of pupils under instruction increased from 40,674 in 1881-2 to 50,670 in 1892-3 and 55,465 in 1900-1. In 1903-4, 60,257 boys and 3,739 girls were at school, being respectively 40·2 and 2·3 per cent. of the children of school-going age. The number of educational institutions, public and private, in that year was 3,518, including an Arts college, 40 secondary, 3,277 primary, and 200 special schools. The most notable institution is the Ravenshaw College at Cuttack. The city also contains medical, survey, and training schools maintained by Government, two schools for the education of Europeans and Eurasians, known respectively as the Protestant European school and the St. Joseph's Convent (Roman Catholic), and three high schools. Of 52 girls' schools, only two teach up to the middle scholarship standard, the rest being all of the primary class. The total expenditure on education in 1903-4 was 3 lakhs, of which Rs. 62,000 was met from Provincial funds, Rs. 52,000 from District funds, Rs. 3,000 from municipal funds, and 1·5 lakhs from fees.

In 1903 the District contained 15 dispensaries, of which 4 had accommodation for 96 in-patients. At these the cases of 123,000 out-patients and 1,200 in-patients were treated, and 6,100 operations were performed. The expenditure was Rs. 41,200, of which Rs. 16,700 was met from Government contributions, Rs. 10,200 from Local and Rs. 3,700 from municipal funds, and Rs. 10,400 from subscriptions.

A lunatic asylum at Cuttack has accommodation for 43 male and 6 female lunatics.

The District is exceptionally liable to small-pox epidemics, and the death-rate from this cause in 1900–1 amounted to 3·6 per 1,000. Since that year, however, the deaths from small-pox have largely decreased and were only 289 in 1904, as compared with 7,253 in 1901; this result being attributed to the action taken against professional inoculators, of whom there were found to be 264 in the District. Vaccination is not compulsory except in municipal areas, but during 1903–4 the number of persons successfully vaccinated was 63,000, or 31·9 per 1,000 of the population.

[Sir W. W. Hunter, *Orissa* (1872), and *Statistical Account of Bengal*, vol. xviii (1877); A. Stirling, *Account of Orissa* (Serampore, 1822, reprinted in Calcutta, 1904); G. G. Toynbee, *Sketch of the History of Orissa from* 1803 *to* 1828 (Calcutta, 1873); N. N. Banerjī, *Report on the Agriculture of Cuttack* (Calcutta, 1893); S. L. Maddox, *Final Report on the Survey and Settlement of the Province of Orissa* (Calcutta, 1900); and L. S. S. O'Malley, *District Gazetteer* (Calcutta, 1906).]

Cuttack Subdivision.—Head-quarters subdivision of Cuttack District, Bengal, lying between 20° 2′ and 20° 42′ N. and 85° 20′ and 86° 44′ E., with an area of 1,562 square miles. The population in 1901 was 1,035,275, compared with 981,991 in 1891. The west of the subdivision lies on the fringe of the Chotā Nāgpur plateau, while on the east it is bounded by the Bay of Bengal. The central tract is a fertile and densely populated plain, intersected by the Mahanādī and its offshoots. The density for the whole subdivision is 663 persons per square mile. It contains one town, CUTTACK CITY (population, 51,364), its head-quarters; and 2,599 villages.

Cuttack City (*Kataka*, the fort).—Head-quarters of Cuttack District and of the Orissa Division, situated in 20° 29′ N. and 85° 52′ E., on the peninsula formed by the bifurcation of the Mahānadī where it throws off the Kātjurī. The place first sprang into importance in the tenth century, when protecting dikes were built and a fort was constructed by the Hindu king Makar Kesari. An ancient fort, called Bārabāti Kilā, of undoubted Hindu origin, is still one of the most conspicuous monuments in the city. Cuttack was the head-quarters of both the Mughal and the Marāthā administrations, and for many years after its occupation by the British gave its name to the whole province. The population, which was 42,667 in 1872 and 42,656 in 1881, increased to 47,186 in 1891, and to 51,364 in 1901, including 4,810 persons in cantonments. In 1901 Hindus numbered 40,320, Muhammadans 8,886, and Christians 2,047, while there were a few Brahmos and Jains. Cuttack is noted for its filigree work. The trunk road passes through it, and the principal roads in the District

converge on it; it is also served by the Mahānadī, and is connected by canal with Chāndbāli and False Point.

Cuttack was constituted a municipality in 1876. The income during the decade ending 1901–2 averaged Rs. 48,000, and the expenditure Rs. 42,000. In 1903–4 the income was Rs. 54,000, including Rs. 19,000 from a tax on persons (or property tax), Rs. 10,000 from a conservancy rate, and Rs. 9,000 from tolls The incidence of taxation was R. 0–15–2 per head of the population. In the same year the expenditure was Rs. 52,000, the chief items being Rs. 21,000 spent on conservancy, and Rs. 8,000 on roads. In the cantonment a wing of a native infantry regiment is stationed. The receipts and expenditure of the cantonment fund during the decade ending 1900–1 averaged Rs. 4,800 and Rs. 4,700 respectively. In 1903–4 the income was Rs. 11,500, and the expenditure Rs. 7,250. Cuttack is the head-quarters of a Superintending Engineer and three Executive Engineers. In addition to the usual public offices, the chief public works are the stone embankments by which the city is protected from inundation, the Mahānadī railway bridge, and the Mahānadī irrigation anicut. The District jail has accommodation for 409 prisoners, who are employed on oil-pressing, the preparation of coir fibre, carpet-making, and weaving. Cuttack contains several important educational institutions, the most notable being the Ravenshaw College. This is divided into a general department teaching from the F.A. to the M.A. standard, and a law department preparing students for the B.L. examination; it also possesses a high school teaching up to the matriculation standard. There are also medical, survey, and training schools maintained by Government, the Protestant European school and St. Joseph's Convent (Roman Catholic) for the education of Europeans and Eurasians, both of which receive grants-in-aid, and three other high schools. The Cuttack General Hospital has beds for 60 male and 22 female patients.

Cutwa.—Subdivision and town in Burdwān District, Bengal. *See* KĀTWA.

Dābha.—Petty State in MAHĪ KĀNTHA, Bombay.

Dabhoi.—Town in the Baroda *prānt*, Baroda State, situated in 22° 8′ N. and 73° 28′ E., about 18 miles distant from the capital. Population (1901), 14,034. Dabhoi, the Sanskrit Darbhavati of the eleventh century, is one of the most interesting towns in the Gaikwār's dominions, not only from its past history, but also for the beauty of its walls and gates. It was fortified early in the thirteenth century by the Vāghelas; and the town is really a fortress, the walls forming an irregular figure approximating to a square, the north, east, south, and west sides being 1,025, 900, 1,100, and 1,025 yards long, with a round tower at each angle. The height is rather less than 50 feet. These

walls are ornamented throughout with sculptured horizontal bands, and the gateways are covered with a profusion of sculptured ornament. Of these latter, the finest by far must have been the eastern or Diamond Gate, concerning which James Forbes, author of the *Oriental Memoirs*, remarked :—

'In proportion of architecture and elegance of sculpture the Gate of Diamonds far exceeds any of the Hindu ancient or modern structures I have met with. This beautiful pile extends 320 feet in length, with proportionate height. Rows of elephants, richly caparisoned, support the massy fabrics. The architraves and borders round the compartments of figures are very elegant ; and the groups of warriors, performing martial exercises, on horseback, on foot, and on fighting elephants, approach nearer to the classical bas-reliefs of ancient Greece than any performances I have seen in Hindustān.'

Unfortunately, however, most of this magnificent gate has disappeared, partly through neglect and the action of time, and partly through the ravages of Musalmān bigotry. There are also three other gates of more or less beauty, the most graceful and most perfect being the Chāmpāner Gate to the north of the town. On the right of the Diamond Gate the highly finished and very beautiful Bhadra Kālikā Mātā temple is worthy of notice, as well as the minutely carved temple to Mahādeo on the left.

Dabhoi has of late years increased in importance by becoming a railway junction. It is the centre to which the narrow-gauge lines from Miyāgām, Baroda, Chāndod, and Bodeli converge. The present population consists of many castes and creeds, the most prominent being the Sāthodra Nāgars, Dāsa Lād Vāniās and their *purohits* (family priests), the Khedāwāls, the Shrimali Vāniās, the Audīchya Tolakiya Brāhmans, and the Tais. The last are Musalmāns, and are for the most part engaged in weaving, producing turbans, in which there is a large export trade. Silver and copper anklets, besides other articles of copper and brass, are also made here. Wood-carving is carried on to some extent, and there is a good trade in cotton, grain, and the seeds of the *mahuā*. A municipality was constituted in 1905, with an income of Rs. 6,000 from customs, excise, and tolls. The town possesses Anglo-vernacular schools, a dispensary, Munsif's and magistrate's courts, local offices, and a cotton-ginning factory.

[J. Burgess and H. Cousens, *Antiquities of Dabhoi* (Edinburgh, 1888).]

Dābhol.—Port in the Dāpoli *tāluka* of Ratnāgiri District, Bombay, situated in 17° 35′ N. and 73° 10′ E. Population (1901), 4,415. Dābhol was a place of considerable historical importance, and the principal port of the South Konkan in the fourteenth, fifteenth, and sixteenth centuries, carrying on an extensive trade with Persia and the Red Sea ports. It is also noted for its beautiful mosque, which is the

only specimen of pure Saracenic architecture in the Southern Konkan. The underground temple of Chandikābai is said to have been built in A.D. 550–78. Dābhol was the capital of a province of the Bijāpur kingdom under Yūsuf Adīl Shāh, which extended from the Sāvitrī river to Devgarh, including nearly the whole of the present District of Ratnāgiri. The name is alternatively derived from Dābhileshwar, a name of Siva, or from Dābhya, a god-frequented forest. At present Dābhol is the port for the maritime trade. The business of Chitpur is confined to the forwarding of goods. In 1903–4 the exports amounted to 15 lakhs and the imports to 17 lakhs. The port has three lighthouses, of which one on Polkeshwar Point shows a light visible for 15 miles. Dābhol contains one school, with 192 boys and 12 girls.

Dablāna.—Village in the State of Būndi, Rājputāna, situated in 25° 35′ N. and 75° 40′ E., on the left bank of the Mej river, about 11 miles north of Būndi town. Population (1901), 1,136. A battle was fought here about 1745 between the Hāra Rājputs under Mahārao Rājā Umed Singh and a large army sent by Mahārājā Isri Singh of Jaipur, in which the former were defeated.

Dābrī.—*Thakurāt* in the MĀLWĀ AGENCY, Central India.

Dabwāli Sub-tahsīl.—Sub-*tahsīl* of the Sirsa *tahsīl* of Hissār District, Punjab, with an area of 349 square miles. It contains 59 villages, and the land revenue and cesses amounted in 1903–4 to Rs. 96,000.

Dacca Division (*Dhāka*).—Division of Eastern Bengal and Assam, extending from the Gāro Hills to the sea, and lying between 21° 49′ and 25° 26′ N. and 89° 19′ and 91° 16′ E. On the east the Surmā and the Meghnā, and on the west the Madhumatī, with its continuations the Baleswar and the Haringhāta, form the general lines of boundary. The head-quarters of the Commissioner are at DACCA CITY. The Division includes four Districts, with area, population, and revenue as shown below:—

District.	Area in square miles.	Population, 1901.	Demand for land revenue and cesses, 1903-4, in thousands of rupees.
Dacca	2,782	2,649,522	7,27
Mymensingh	6,332	3,915,068	12,73
Farīdpur	2,281	1,937,646	7,51
Backergunge	4,542	2,291,752	21,60
Total	15,937	10,793,988	49,11

The recorded population increased from 7,597,500 in 1872 to 8,707,040 in 1881, to 9,845,296 in 1891, and to 10,793,988 in 1901, when the density was 677 persons per square mile, a very high figure.

No less than two-thirds of the population are Muhammadans and nearly one-third are Hindus; Animists number 29,000, Christians 23,000 (of whom 21,500 are natives), and Buddhists 7,000. The principal caste is that of the Namasūdras or Chandāls, whose home is in the swamps of the delta, and whose numbers, in spite of wholesale conversions to Islām, still exceed a million.

The Division is watered by the three great converging river systems of the BRAHMAPUTRA, the PADMĀ, and the MEGHNĀ, and, with the exception of the Susang hills which rise on the northern boundary of Mymensingh, forms one wide alluvial plain; a slightly elevated tract of older alluvial formation, known as the MADHUPUR JUNGLE, extends down the centre of Mymensingh and Dacca Districts as far south as Dacca city. Famine is almost unknown in the Division; the rains rarely fail and, thanks to the great fertility of the soil, on which immense crops of rice and jute are grown, the peasantry are the most prosperous in Bengal. The Division contains 17 towns and 26,928 villages, the largest towns being DACCA CITY (90,542) and NĀRĀYANGANJ (24,472). The chief places of commercial importance are Dacca, Nārāyanganj, and JHĀLAKĀTI, and a considerable amount of trade passes through GOALUNDO.

There are ruins at BIKRAMPUR, at one time the head-quarters of the Sen dynasty, and at SONĀRGAON, the first capital of the Muhammadans in Eastern Bengal; and ancient legends also attach to remains at RĀMPĀL, DURDURIA, SĀBHĀR, and elsewhere. In more recent times, Dacca city was the Muhammadan capital, and it is a town of considerable historical interest.

Dacca District (*Dhāka*).—District in Eastern Bengal and Assam, lying between 23° 14′ and 24° 20′ N. and 89° 45′ and 90° 59′ E., with an area of 2,782 square miles. It is bounded on the south-west by the Padmā, which separates it from Farīdpur; and on the east by the old bed of the Brahmaputra (here called the Meghnā), which divides it from Tippera; Mymensingh forms the northern boundary; and at the north-west angle the Brahmaputra (or Jamunā) separates it from Pābna District.

Physical aspects.

Dacca is at once the type and the metropolis of Eastern Bengal. A wedge of friable soil, thrust in between the converging waters of the PADMĀ or modern channel of the Ganges and the MEGHNĀ, it is subject to all the vicissitudes of alluvion and diluvion, as well as to the periodic inundation and silt fertilization which are characteristic of this fortunate part of the Province. A century ago the BRAHMAPUTRA flowed past the eastern border of the District, and its confluence with the Padmā took place at the southern apex; but the channel has now swung to the west, and it meets the Padmā at Goalundo, at the north-west corner of the

District, the united waters sweeping past its south-western face, before entering the Bay through the Meghnā estuary. Dacca is a level plain broken only by the Madhupur jungle, a stiff layer of red ferruginous clay, which rises in low ridges above the newer alluvium and extends across the border into Mymensingh. The formation is of considerable depth and offers much resistance to the erosive action of the rivers; and when the Brahmaputra, towards the end of the eighteenth century, had raised its eastern channel and was compelled to find another outlet, it was the stiff clay of the Madhupur jungle which forced it to break westwards and join the Padmā at Goalundo. The scenery in this part is wild, and the deep gorges cut by the Bansi and the Lakhyā rivers through the forest-clad uplands are very beautiful.

Forming the focus of three great river systems, Dacca is essentially a water District, and during July and August, when the rivers are swollen by the rainfall and melting of the Himālayan snows, the greater part of the surface is submerged. The Padmā, after receiving the waters of the Brahmaputra (or Jamunā), eventually discharges its volume into the Meghnā through a channel 2 miles wide, known as the Kīrtināsā. The Dhaleswarī is a very old channel and was apparently a continuation of the Karatoyā and Atrai, from which it was severed at the end of the eighteenth century by the Brahmaputra. In recent years it has been fed by three channels from the Brahmaputra (or Jamunā) in the south-western corner of Mymensingh, and flows through Dacca District in a south-easterly direction, parallel with the Padmā, and, after receiving the Ichāmatī on its right bank, falls into the Meghnā below Munshiganj. The river is navigable by steamers below Sābhār, where it is joined by the Bansi. The Burhī Gangā is now an arm of the Dhaleswarī, which it leaves just below Sābhār and rejoins, after flowing past Dacca city, a little above Nārāyanganj, the tract between the two rivers forming a large island known as Pārjoār. The Burhī Gangā is fed by the Turāg, which enters the District from Mymensingh and joins it 2 miles above Dacca city. The deterioration of the Dhaleswarī, added to a tendency of the mouth to silt up, is threatening to ruin the Burhī Gangā as a navigable river, and so imperil the river trade of Dacca city. The Lakhyā leaves the Brahmaputra at the northern boundary of the District and flows southwards till it empties itself into the Dhaleswarī, about 4 miles from the junction of that river with the Meghnā; it is a favourite route in the rains for boats plying between the Districts of Dacca and Mymensingh. The upper reaches now carry very little water in the dry season, especially since the earthquake of 1897, and are overgrown with weeds through which only the smallest boats can be pushed. The real channel, which at present feeds the lower reaches, is known as the Bānār river, and leaves the Brahmaputra about 12 miles west of the

Lakhyā. The Balu, another tributary of the Lakhyā, which it joins also on the west bank about 10 miles north of its junction with the Dhaleswarī, drains the marshes which are fed by the Tungī river, a branch of the Turāg. All these rivers are more or less affected by the tide, and the Burhī Gangā rises and falls to the extent of 2½ feet at Dacca city. In the rains they rise in average years as much as 14 feet, the maximum recorded having been 17 feet in 1890.

The greater part of the District is covered by recent alluvial deposits, consisting of sandy clay and sand along the course of the rivers, and fine silt consolidating into clay in the flatter parts of the river plain. The ferruginous clay of the Madhupur jungle belongs to an older alluvial formation.

The District contains no Government forests, but the Madhupur jungle is covered with a dense growth of tall trees overrun with creepers, and with numerous large grasses at their base. The forest is similar in composition to those under the Himālayan range, containing a mixture of *Leguminosae*, *Combretaceae*, *Anacardiaceae*, *Urticaceae*, *Meliaceae*, and *Sapindaceae*. East of the Lakhyā the ground is lower and more subject to inundation, and here the laterite islands are mostly covered by scrub jungle, with numerous wild or semi-wild mango groves. In the north jack-trees (*Artocarpus integrifolia*) are common. The south of the District lies low and is inundated during the rainy season to a depth of from 8 to 14 feet, the water covering everything except the river banks and the artificial mounds on which the houses are built. This higher ground is, where not occupied by gardens, densely covered with a scrubby jungle of semi-spontaneous species, from which rise bamboos with a few taller trees, such as the *jiyal* (*Odina Wodier*) and the conspicuous red cotton-tree (*Bombax malabaricum*). The surface of the marshes either shows huge stretches of inundated rice, or is covered with matted floating islets of sedges and grasses and various water-lilies, the most striking being the *makana* (*Euryale ferox*).

Tigers and leopards are still found in the jungle, as also are wild hog and deer, including *sāmbar*, marsh deer, and barking-deer; but they are disappearing before the advance of cultivation.

Temperature is uniform and a high degree of humidity prevails from April to October; the mean temperature remains at 84° from April to September, but falls in the cold season to 67°. Rainfall commences early and is heavy, the average annual precipitation being 72 inches, of which 9·6 inches fall in May, 12·7 inches in June, 13·5 inches in July, and 12·6 in August, rather less than 9 inches in September, and 4 inches in October.

Heavy floods have been frequent in recent years; but the highest recorded took place in 1787, when the streets of Dacca city were

submerged to a depth sufficient to admit of boats sailing along them, and 60,000 persons perished during the inundation and subsequent famine. Immense loss of property was occasioned, and the lands, which relapsed into jungle owing to the loss of cultivators and cattle, took many years to recover. A serious earthquake occurred in April, 1762, when rivers and marshes were violently agitated, rising high above their usual level, and 500 persons are said to have lost their lives. The earthquake of 1897 did much damage in Dacca city, and the rivers and marshes in the north of the District underwent a further upheaval. An account will be found, in the article on DACCA CITY, of two recent tornadoes which wrought great havoc in the vicinity.

History.

Authentic history begins with Musalmān chronicles, but many local legends and crumbling ruins bear witness to the power of prehistoric rulers. The Dhaleswarī river originally formed the southern border of the kingdom of Kāmarūpa, the western boundary being the Karatoyā river. Mounds of earth and bricks are connected with the memories of Jasha Pāl at Dakuri, and of Haris Chandra Pāl at SĀBHĀR, while Sisu Pāl is said to have resided near Mahuna; these Pāl kings may have had some connexion with the Buddhist Pāl dynasty, which rose to power in Bengal early in the ninth century. South of the Dhaleswarī lies the *pargana* of Bikrampur, called after the mythical Vikramāditya. Here the village of RĀMPĀL was the head-quarters of Hindu kings from the time of Vikramāditya till the Muhammadan rule began. Ballāl Sen, the most famous Hindu ruler of Bengal, held his court here, and at an earlier date it was under the rule of Adisur, who has been identified with the founder of the Sen dynasty.

The Muhammadans first entered Bengal in 1199, and though East Bengal was not subdued till later, there is a tradition that *kāzīs* were appointed, and the tomb of Pīr Adam near Ballāl *bāri* probably dates from about this period. In 1296 the great Alā-ud-dīn became emperor of Delhi, and he divided Bengal into two provinces, making Bahādur Shāh governor of the south-east, with his head-quarters at SONĀRGAON, a town near the banks of the Meghnā, 15 miles east of the modern Dacca. In 1330 the emperor Muhammad bin Tughlak established three provinces, and Tātār Bahrām Khān became governor of Sonārgaon. In 1351, when Bengal was united under Shams-ud-dīn, Sonārgaon became the residence of the governors. In 1608 Shaikh Islām Khān was appointed governor of Bengal, and he moved the capital from Rājmahāl to Dacca, a measure dictated by military considerations. The eastern frontier of Bengal was then exposed to the ravages of numerous warlike invaders; the Ahoms from Assam raided the north of the District, while from the south the Maghs or Arakanese, in alliance with Portuguese pirates, harried the country and rendered all

the waterways unsafe. The Mughal viceroys protected their frontier by maintaining a powerful fleet, which was largely officered by Portuguese, and distributed colonies of veterans on feudal holdings throughout the country. Mīr Jumla became governor of Bengal in 1660, and his viceroyalty was the most flourishing era in the history of Dacca. To guard against the invasions of the Maghs, he built several forts at the confluence of the Lakhyā and Dhaleswarī, the ruins of which are still to be seen; Hājīganj is now in possession of the Nawāb of Dacca, and Idrakpur is the residence of the subdivisional officer of Munshiganj. Shaista Khān, nephew of the empress Nūr Jahān, succeeded Mīr Jumla. He was the viceroy who added Chittagong to the empire, and he it was who, under the orders of Aurangzeb, confiscated the English factories and put the commercial agents at Dacca in irons. Both these governors are remembered for their encouragement of architecture and public works, and Shaista Khān has given his name to a well-known style of architecture in the city.

The political downfall of Dacca dates from 1704, when Murshid Kulī Khān transferred the seat of Government to Murshidābād. Dacca was subsequently governed by a *naib* or deputy of the viceroy, with a jurisdiction considerably more extensive than the present Dacca Division. On the establishment of the British power in 1757, the office of *naib* became an empty title, but it was continued in the family of the last representative until 1845.

At the time of the Permanent Settlement, the Dacca Collectorate included also the now separate Districts of Backergunge and Farīdpur. Mānikganj subdivision was transferred from Farīdpur in 1858 and the Mulfatganj *thāna* to Backergunge in 1867.

The population of the present area increased from 1,827,931 in 1872 to 2,090,877 in 1881, to 2,395,430 in 1891, and to 2,649,522 in 1901.

Population.

With the exception of the west of the Mānikganj subdivision, which is extremely malarious, the District is healthy and the people are very prosperous; but the population is now so dense in most parts that it is scarcely likely that it will continue to grow as rapidly as it has done hitherto.

The principal diseases are malarial fever, skin diseases, worms, dyspepsia, dysentery, diarrhoea, diseases of the spleen, respiratory affections, and, in some parts, elephantiasis. Two-thirds of the deaths reported are attributed to fever and about one-eighth to bowel complaints and cholera, of which there have been several local epidemics in recent years.

The chief statistics of the Census of 1901 are shown in the table on the next page.

The two towns are DACCA CITY and NĀRĀYANGANJ. The density of population is far greater than elsewhere in Bengal; and the figure

would be still higher but for the Madhupur jungle, where the population, though growing rapidly, is still comparatively sparse. The Srīnagar *thāna* of the Munshiganj subdivision supports 1,787 persons to the square mile. A considerable temporary emigration takes place among the poorer classes to assist in agricultural operations in Backergunge, but this is partly counterbalanced by a similar immigration from the United Provinces and Bihār (especially Monghyr). The immigrants are attracted by the jute industry in the rainy season, while in the cold season they scatter over the District and find employment as earth-workers, fishermen, boatmen, street coolies, and *pālki*-bearers. A very large number of males of the educated castes find employment elsewhere in clerical service or in business, and there is consequently a preponderance of females among the Kāyasths and Sāhās enumerated in the District. Bengali is the vernacular, but Hindustāni is spoken by up-country immigrants, and by a large number of respectable Muhammadan families. The Muhammadans number 1,650,000, or more than three-fifths of the population, and Hindus 988,000, or 37 per cent.

Subdivision.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Dacca . .	1,266	1	2,647	881,517	696	+ 11·4	57,876
Nārāyanganj .	641	1	2,177	660,712	1,031	+ 15·0	35,079
Munshiganj .	386	...	978	638,351	1,654	+ 9·9	57,125
Mānikganj .	489	...	1,461	468,942	959	+ 4·5	23,265
District total	2,782	2	7,263	2,649,522	952	+ 10·6	173,345

The majority of the Muhammadans are Shaikhs (1,556,000), the bulk of whom are doubtless the descendants of converts from Hinduism. Namasūdras (236,000), who supply nearly a quarter of the total Hindu population (988,000), are probably the remains of an aboriginal race, and it is to this caste that the ordinary Dacca Musalmān appears to be by origin akin. Another aboriginal tribe is that of the Kochs of the Madhupur jungle, who have worked their way down from their old home on the banks of the Sankosh river. Of the common functional castes of Bengal, the most important, though not numerically the strongest, is the weaving caste of Tāntis; they are divided into two rival classes, whose annual processions on the occasion of the Janmāstami festival still constitute a gorgeous and unique spectacle, recalling mediaeval customs. The three great literary castes, the Brāhmans (66,000), Kāyasths (86,000), and Baidyas (11,000), are well

represented. The last named, though the least numerous, are the most highly educated; two-thirds of their males and one quarter of their females are literate, and one-third of their males know English. The Sāhās, the chief trading caste, are also numerous (71,000), and their advance in education, wealth, and social position has been marked in recent years. Europeans number 205, the majority of them being employed in the jute trade in Dacca city and Nārāyanganj. Of the total population 65·3 per cent. are supported by agriculture, 18·6 per cent. by industries, 1·8 per cent. by commerce, and 2·6 per cent. by the professions.

Dacca contains an exceptionally large number of Christians (12,000). Most of these are Roman Catholics, and they are nearly all native converts, though some are descendants of the renegade Portuguese who entered the service of the Arakanese and were transferred, about 1664, by the Nawāb Shaista Khān from Chittagong to Dacca. There they settled in the town of Firinghī Bāzār, 12 miles from Dacca, and some of their descendants are also to be found in the Nawābganj *thāna*. They have interbred largely with natives, and are locally known as Firinghīs or Franks.

Portuguese missions of the Roman Catholic Church have been settled in the District for three centuries. The church of Tezgaon, near Dacca, is said to have been founded by St. Augustine missionaries prior to 1599; but it has been thought, from its resemblance to early places of worship in the South of India, that it was built at a still earlier date and was only repaired or rebuilt by the Portuguese missionaries. The burial-ground attached to the church contains a tombstone dated 1714. There is now a resident priest, with a congregation of 215 native Christians. The church at Nāgari, in Bhawāl, which was built in 1664, belongs to another early mission, and has a community of 1,500 native Christians with a resident priest. Another mission at Hāsnābād in the Nawābganj *thāna* was founded in 1777, and has two resident priests and a congregation of 2,518; 757 native Christians in an adjacent village also belong to it. These missions, together with one in Dacca city with two priests and a flock of 120, are all under the jurisdiction of the Bishop of Mylapore. In the beginning of the nineteenth century, the Roman Propaganda began a work of revival. The Portuguese missionaries, whose head-quarters were at Goa, opposed this, and a schism took place; and as a result there is another Roman Catholic Church in Dacca under the Bishop of Dacca. Included in his see are several missions with an aggregate number of 7,000 converts. The English Baptist Missionary Society commenced work in 1816 and has made some 200 converts, and the Oxford Mission has recently opened a branch at Dacca.

The climate, the soil, and the river systems are all favourable to

agriculture, and the copious rainfall precludes the necessity for artificial irrigation, except to a small extent in the undulating uplands of the Madhupur jungle. The greater part of the District is flooded annually, and the long-stemmed rice, which is the principal crop, is thus practically independent of the rainfall after the first few weeks of its growth; moreover, the flood-water enriches the soil with a thick deposit of silt. From an agricultural point of view the District may be divided into four tracts: Bhāwāl corresponding to the Madhupur jungle, the tract between the Lakhyā and the Meghnā rivers, the remainder of the interior, and the mud flats along the great rivers. In the first, autumn rice, jute, and winter crops grow on the high lands, transplanted rice on the lower elevations, and spring rice on the edges of rivers and marshes. The second is the great jute tract. In the third, winter rice and *rabi* crops, including oilseeds, are grown; and in the fourth, autumn rice, jute, oilseeds, and pulses, and in the moist land, spring rice.

Agriculture.

The chief agricultural statistics for 1903-4 are shown below, areas being in square miles:—

Subdivision.	Total.	Cultivated.	Cultivable waste.
Dacca	1,266	808	50
Nārāyanganj	641	422	30
Munshiganj	386	273	21
Mānikganj	489	376	26
Total	2,782	1,879	127

Of the cultivated area 19 per cent. produces more than one crop during the year. Rice is grown on 1,390 square miles and is the staple food-crop; the most common variety is harvested in the winter, but early rice and spring rice are also largely cultivated. The winter rice is sown broadcast in Munshiganj and Mānikganj, but elsewhere the seedlings are transplanted; the soil is prepared by repeated ploughings from December to February, and seed is sown after the first fall of rain. This rice grows very rapidly, and in swamps during the rainy season frequently shoots up 12 inches in twenty-four hours as the inundation rises. A high and sudden rise of water, however, is apt to overtop the plant, and if it does so for long, the crop is lost. The early variety, which like the winter rice is sown in March, April, and May, is scattered broadcast on the higher lands and is of rapid growth, being reaped in June, July, and August. Early and winter rice are frequently sown together, and mustard is sometimes sown on winter rice lands before that crop is reaped. For the spring rice, the seed, which has first been allowed to germinate, is sown in the cold season in deep marshy ground and newly formed mud flats, and afterwards transplanted; it is reaped in

The other exports are comparatively unimportant; hides are sent to Calcutta, and pulses, betel-leaves, oilseeds, and pottery to Calcutta, Chittagong, Backergunge, and other neighbouring Districts. Trade is not confined to any particular community or caste; Europeans, Armenians, Muhammedans, and Hindus (especially Sāhās and Telis) are all engaged in it.

In addition to Nārāyanganj and Dacca, there are many large marts on the waterways throughout the District, of which Jāgīr Hāt on the Dhaleswarī (where nearly all the tobacco consumed in the District is brought in from Rangpur), Baidya Bāzār,. Narsingdī, Munshir Hāt on the Meghnā, and Lohajang on the Padmā are among the most important. The Kārtik Bāruni *mela* is a commercial gathering, held near Munshiganj in December and January. Religious festivals are also held at Nāngalband near Sonārgaon, at Dhāmrai, and at Lohajang.

A metre-gauge railway runs to Mymensingh from Nārāyanganj, which is connected with Calcutta by rail and steamer via Goalundo; and the construction of 66 miles of feeder-roads has done much to open up the Madhupur jungle. The most important of these are an embanked road from Tungī to Kālīganj, on the Lakhyā, with a continuation to the Meghnā at Narsingdī, and roads connecting Srīpur and Rājendrapur with the Bānār river at Gosinga and Kāpāsia respectively, from Rājendrapur to Mirzāpur, and from Jaydebpur to Kadda. A road connects Dacca city with Baidya Bāzār, and has a branch to Nārāyanganj; the portion between Dacca and Nārāyanganj is metalled. The Baidya Bāzār road was intended to link Dacca with Comilla, but has not been much used as a trade route. The Dacca-Mymensingh road, unmetalled but bridged throughout, except at the Bānār and Tungī rivers, is connected with the railway by feeder-roads; and an unmetalled road from Dacca to Seālo (on the east bank of the Padmā opposite to Goalundo) connects the head-quarters of the Mānikganj subdivision with Dacca and Goalundo. Excluding 379 miles of village roads, which are in general mere bridle-paths, and municipal roads, the District contains 321 miles of road maintained by the District board. Owing to the excellent water communication, roads are but little needed; indeed, outside the towns carts are rarely used, and in the dry season goods are packed on bullocks and ponies.

Water communication is maintained by a network of channels between the big rivers. The Padmā is connected with the Dhaleswarī by the Hilsāmāri, Ichāmatī, Tāltola, and Srīnagar *khāls*, though the two last named are navigable by large boats only in the rains; the Meghnā is similarly connected with the old Brahmaputra by the Ariāl Khān and Mendikhāli. Numerous other boat routes tap marts in the interior, and, indeed, in the rainy season there are few parts of the District inaccessible to water traffic. The Jamunā, the Padmā, and the Meghnā

are navigable by large river steamers at all seasons of the year; and there are daily services between Nārāyanganj and Cāchār, Sylhet, Goalundo, Chāndpur, Barisāl, and Khulnā, and also weekly cargo services between Dacca and Nārāyanganj and Calcutta via the Sundarbans. The bulk of the trade with Calcutta travels by this route, which is cheaper than the alternative route by steamer and rail via Goalundo. There is also a service of steamers on the Dhaleswarī. All these steamers, as well as those plying between Goalundo and Assam and Chāndpur, stop at several stations on the Dacca shore for cargo and passengers.

Administration.

For administrative purposes the District is divided into four subdivisions, with head-quarters at DACCA CITY, NĀRĀYANGANJ, DASARA (Mānikganj), and MUNSHIGANJ. The District staff subordinate to the Magistrate-Collector at head-quarters consists of a Joint-Magistrate, an Assistant Magistrate, and eleven Deputy-Magistrate-Collectors; the Nārāyanganj subdivision is in charge of a member of the Indian Civil Service, and the other two are under Deputy-Magistrate-Collectors.

At Dacca city the District Judge has three Sub-Judges and four Munsifs subordinate to him for the disposal of civil work; one of the former is a Small Cause Court Judge and sits also at Munshiganj; four Munsifs sit at Nārāyanganj, four Munsifs and a registrar of the Small Cause Court at Munshiganj, and three Munsifs at Mānikganj. The criminal courts include those of the Sessions Judge, the Additional Sessions Judge (who acts also for the District of Mymensingh, where he is chiefly employed), the District Magistrate, and the Joint, Assistant, and Deputy-Magistrates mentioned above. Land disputes are the most common cause of the cases which come before the courts, but, though these frequently lead to petty affrays, they do not often result in serious crime.

Little is known of the early land revenue history of the District. According to tradition, Sikandar Shāh (1358–89) made a survey of at least a part of it with a large standard of measurement still known as the Sikandari *gaj* (or yard measure); but the first settlement of which any record remains is that made by Rājā Todar Mal, Akbar's great finance minister, in 1558. The province of Dacca, corresponding roughly with the modern Dacca Division, was divided into two *sarkārs* named Sonārgaon and Bājūha. About a third of the area was allotted free of revenue in return for services rendered on the civil and military establishments, *nawāra* lands assigned for the upkeep of the fleet being the most common of this class. During the twenty years which followed the acquisition of the administration by the East India Company in 1765; the assessment of the Dacca province was reduced from 38 lakhs to 28 lakhs. In 1768 the *nawāra* lands were resumed

by Mr. Sykes, and other tenures, such as *bāghmāra*, were abolished in 1771. The number of estates has largely increased by partition; of 10,517 estates now on the revenue roll only four pay more than Rs. 10,000 as revenue. The current land revenue demand in 1903-4 was 5·21 lakhs, of which 4·25 lakhs was due from 9,843 permanently settled estates, Rs. 60,000 from 460 temporarily settled estates, and the remainder from 214 estates held direct by Government. The land revenue of this fertile District is extraordinarily low; it represents only 13·9 per cent. of the rental, and its incidence per acre of the cultivated area is only R. 0-6-11. The landlords' receipts, on the other hand, are not limited to the amount shown in their rent rolls, as it is their universal practice to demand a high premium, which is really a capitalized portion of the rent, on the inception of a tenancy. On this account, rents appear low, as compared with those paid in Bihār and elsewhere. The rates per acre for arable and homestead lands are: in the head-quarters subdivision Rs. 3, and from Rs. 15 to Rs. 20, respectively; in Nārāyanganj Rs. 1-8 to Rs. 5, and Rs. 4 to Rs. 20; in Mānikganj Rs. 1-8 to Rs. 4, and Rs. 3 to Rs. 8; and in Munshiganj Rs. 2-4 and Rs. 15. The *bargā* system, whereby a tenant has his land cultivated by another in return for a share of the produce, is very common; but whereas the *bargādār* elsewhere acquires no tenant-right, in Dacca he holds under a tenant lease and has been held not to be liable to ejectment save for default of rent. The average area of a cultivator's holding in high lands is 3 acres, and in low and fertile lands one acre; but on the alluvial islands in the large rivers a single tenant may hold as much as 30 acres. A holding generally comprises both arable and homestead land, the latter including the plots round the house where tobacco and vegetables are grown, as well as garden or orchard land.

The following table shows the collections of land revenue and total revenue (principal heads only), in thousands of rupees :—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . . .	4,80	4,89	5,11	5,21
Total revenue . . .	13,19	16,49	19,40	20,84

Outside the municipalities of DACCA and NĀRĀYANGANJ, local affairs are managed by the District board and four subdivisional local boards under its control. Owing to the low rent-rates, its income for so wealthy a District is very small, amounting in 1903-4 to Rs. 2,10,000, of which only Rs. 83,000 was derived from road cess. The expenditure was Rs. 1,77,000, including Rs. 92,000 spent on public works and Rs. 58,000 on education.

The District contains 13 police stations or *thānas* and 5 outposts.

The regular force under the District Superintendent consisted in 1903 of 5 inspectors, 52 sub-inspectors, 30 head constables, and 613 constables, including 14 water constables. The village police consisted of 356 *daffadārs* and 4,244 *chaukīdārs*. A company of military police, 100 strong, is stationed in Dacca city. The Central jail there has accommodation for 1,183 prisoners, and sub-jails at the three other subdivisional head-quarters for 75.

According to the Census of 1901, 6·5 per cent. of the population (12·1 males and 1 female) could read and write. The progress in recent years has been remarkable, the percentage of literate males having increased by 37 per cent. since 1891, and by nearly 90 per cent. since 1881. The percentage of literate females has nearly doubled in the last decade, and is five times what it was in 1881. The census figures, however, fail to give a fair idea of the standard of education of the District, owing to the large emigration of educated persons from the Bikrampur *pargana*. The total number of pupils under instruction increased from about 30,000 in 1881–2 to 78,834 in 1892–3; it fell to 76,415 in 1900–1, but rose again in 1903–4, when 80,062 boys and 8,295 girls were at school, being respectively 40·6 and 4·1 per cent. of the children of school-going age. The number of educational institutions, public and private, in that year was 3,310, including 2 Arts colleges, 171 secondary schools, and 1,632 primary schools. An exceptionally large proportion of the pupils have passed beyond the primary stage. The total expenditure on education was 5·49 lakhs, of which Rs. 1,02,000 was met from Provincial funds, Rs. 57,000 from District funds, Rs. 4,000 from municipal funds, and 3·12 lakhs from fees. The principal institutions are situated in DACCA CITY, including the Dacca College, the Jagannāth College, the medical school, the Madrasa, the survey school, and the Eden girls' school; there is also a high school at each of the subdivisional head-quarters. The progress made by the better classes is indicated by the fact that there are no less than 25 printing presses in the District; at 6 of these newspapers are published, 3 of them in English.

In 1903 the District contained 16 hospitals and dispensaries, of which 7 had accommodation for 233 in-patients. The cases of 113,000 out-patients and 3,922 in-patients were treated during the year, and 8,880 operations were performed. The expenditure was Rs. 73,000, of which Rs. 1,800 was met by Government contributions, Rs. 5,000 from Local and Rs. 15,000 from municipal funds, and Rs. 8,000 from subscriptions; Rs. 5,000 was spent during the year on buildings and repairs. The chief institution is the Mitford Hospital in DACCA CITY, where there is also a Lunatic Asylum.

Although vaccination is compulsory only within the Dacca and Nārāyanganj municipalities, it has made good progress throughout the

District, and 95,000 persons, or 37·3 per 1,000 of the population, were successfully vaccinated in 1903–4.

[Sir W. W. Hunter, *Statistical Account of Bengal*, vol. v (1875); Dr. D. G. Taylor, *Topography and Statistics of Dacca* (1840); Hem Chandra Kar, *Jute Cultivation in Dacca* (Calcutta, 1879); A. C. Sen, *Report on the System of Agriculture in the Dacca District* (Calcutta, 1889).]

Dacca Subdivision.—Head-quarters subdivision of Dacca District, Eastern Bengal and Assam, lying between 23° 30′ and 24° 20′ N. and 90° and 90° 43′ E., with an area of 1,266 square miles. The south of the subdivision consists of a level alluvial plain, but to the north the country is broken and rugged, containing large tracts of waste land covered with jungle. The population in 1901 was 881,517, compared with 790,936 in 1891. It contains one town, DACCA CITY, the head-quarters (population, 90,542); and 2,647 villages. The subdivision comprises a large portion of the sparsely inhabited MADHUPUR JUNGLE, and is much less thickly populated than the rest of the District, the density, even when the city is included, being only 696 persons per square mile.

Dacca City.—Head-quarters of the District and Division of the same name, Eastern Bengal and Assam, and also capital of the Province, situated in 23° 43′ N. and 90° 24′ E., on the north bank of the Burhī Gangā river (at one time a main channel of the Padmā), 8 miles above its junction with the Dhaleswarī; 254 miles distant from Calcutta by rail and river via Nārāyanganj and Goalundo. Its name is commonly supposed to be derived from the *dhāk*-tree (*Butea frondosa*), though some assign it to the goddess Dhākeswarī, who has a shrine here. The city is the largest in Eastern Bengal, and had in 1901 a population of 90,542, of whom 53·5 per cent. were Hindus and 45·7 per cent. Musalmāns; among the remainder were 484 Christians and 194 Brahmos. Dacca was a flourishing city long before the days of British rule, and was subsequently the emporium of the well-known muslins which were in great demand in Europe and especially in France. In 1801 the city was estimated to have a population of 200,000, but its prosperity was seriously affected by the French Wars, and in 1830 the population had fallen to 67,000. In the last half-century there has been a revival of the weaving industry, especially of the manufacture of *jhāppāns* and *kasidās*, which are largely exported to Turkey and other Muhammadan countries; and this with the growth of the jute and hide trades has caused a return of prosperity. There has been a steady increase of the population in recent years, the net gain between 1872 and 1901 amounting to 30 per cent.

The city is intersected by a branch of the Dolai creek, and extends along the bank of the Burhī Gangā for a distance of 6 miles, and north-

wards for a mile and a quarter. The two principal streets cross each other at right angles, one running parallel to the river for upwards of 4 miles from the Lālbāgh palace to the Dolai creek, the other, a fine broad street bordered by regularly built houses, leading north from the river to the old military cantonments. The *chauk* or market-place, a large square, lies nearly in the middle of the city, but most of the buildings are poor and are intersected by a network of narrow, crooked lanes. The houses of the European residents extend along the river front for half a mile in the east of the city.

The Muhammadan capital of Eastern Bengal was originally at SONĀRGAON; but about 1608 the governor, Islām Khān, transferred the capital of the whole province from Rājmahāl to Dacca, which was a convenient base for his operations against the Ahoms of Assam, and also against the Portuguese pirates who, in alliance with the Maghs or Arakanese, were then ravaging the waterways of the delta. The city quickly rose to great prosperity, and the English, French, Dutch, and Portuguese all had factories there. In 1704, however, the Nawāb Murshid Kulī Khān moved his residence to Murshidābād; and though Dacca long retained a titular Nawāb, its glory departed with the removal of the court. It now preserves few traces of its former magnificence as the provincial capital. The old fort, erected in the reign of Jahāngīr, has entirely disappeared, and the only public buildings of this period still remaining are the two Katrās, built by Sultān Muhammad Shujā in 1645, the palace of the Lālbāgh which was never completed, and several old mosques: the term *katrā* is applied to the market town belonging to a fort, and the buildings first mentioned apparently derived the name from the rows of shops attached to them. These buildings are now mere ruins, and their decorations have been wantonly destroyed; the old European factories have also been swept away.

The chief event of importance in the recent history of Dacca is connected with the Mutiny of 1857. Two companies of sepoys were then stationed in the fort. On the first alarm of the outbreak at Meerut 100 men of the Indian Navy were dispatched from Calcutta for the protection of the city. With these sailors and about 60 civilian volunteers, it was resolved to disarm the sepoys, who had become mutinous. They offered a stout resistance, and were only dispersed after a sharp struggle, in which 41 rebels were killed on the field, and a number of others were drowned in the river or shot down in their flight. On the formation of the new Province of Eastern Bengal and Assam in 1905, Dacca was selected as the head-quarters of the Local Government.

Two noteworthy tornadoes have occurred in recent years in the vicinity. In the first, in April, 1888, no less than 3,527 houses were

completely demolished; the Nawāb's palace and 148 brick houses were partially wrecked; 121 boats were destroyed, including the police steam launch, which was carried away from its moorings and sunk; and 130 persons were killed and 1,500 injured. The tornado passed on to the Munshiganj subdivision, where it destroyed five or six villages and caused about 70 deaths. The second tornado, in April, 1902, was first felt on the south side. Crossing the river, it described a serpentine course in an easterly direction for 16 miles, leaving behind it a clear-cut avenue, varying from 100 yards to half a mile in breadth, of complete devastation of trees and houses; 88 persons were killed and 338 injured.

Dacca was constituted a municipality in 1864. The income during the decade ending 1901–2 averaged Rs. 1,75,000, and the expenditure Rs. 1,53,000. In 1903–4 the income was Rs. 2,15,000, including Rs. 92,000 from a tax on houses and lands, Rs. 42,000 from a conservancy rate, Rs. 6,000 from a tax on vehicles, Rs. 14,000 from tolls, and Rs. 25,000 as revenue from municipal property. The incidence of taxation was Rs. 1–11–5 per head of the population. In the same year the expenditure amounted to Rs. 2,04,000, the chief items being Rs. 9,000 spent on lighting, Rs. 17,000 on water-supply, Rs. 4,000 on drainage, Rs. 61,000 on conservancy, Rs. 18,000 on medical relief, Rs. 25,000 on roads, and Rs. 3,000 on education. The water-works scheme, which owes its inception to the liberality of the late Nawāb Sir Abdul Gani, is one of the most extensive and complete in Bengal: the water is pumped up from the Burhī Gangā river and filtered, after which it is distributed throughout the city. The original project was completed in 1877 at a cost of Rs. 1,95,000, the Nawāb contributing a lakh and the balance being defrayed by a Government grant. The works were extended in 1891 at a cost of Rs. 1,25,000, obtained by the municipality as a loan from Government. The average annual cost of maintenance during the decade ending 1901 was Rs. 16,000, and the capital expenditure up to 1901 was 3·67 lakhs; from 70,000 to 80,000 persons are daily supplied with filtered water. The city also possesses an electric light installation, presented by the late Nawāb Sir Ahsān-ullah, who gave 2 lakhs for the original construction and 2 lakhs more for its maintenance. The two main streets are now lighted by incandescent lamps, and electric light is supplied to several shops and private houses, which are also provided with electric fans.

Thanks to the fertility of the surrounding country and its proximity to several great rivers, Dacca is a progressive place, and including the commerce of its river ports at NĀRĀYANGANJ and Madanganj, it is the most important inland mart of Eastern Bengal. Jute, oilseeds, and hides are collected for export, piece-goods, salt, and kerosene oil are

imported, and there is also a large trade in rice and other commodities. The other important industries, besides the jute trade, are weaving, gold and silver-work, shell-carving, and boat-building; these are described in the article on DACCA DISTRICT.

The city is well provided with educational institutions. Dacca College, originally established by Government as an English seminary in 1835, was raised to the status of a college in 1841, the present building having been completed in 1846. The college is affiliated to the Calcutta University, and is, after the Presidency College, the largest first-grade college in Bengal, having 304 students on the rolls in 1904, and a staff of a European principal and twelve professors and lecturers; in that year the expenditure amounted to Rs. 52,000. Attached to it is a collegiate school, with 449 scholars on its rolls. Jagannāth College, which imparts education up to the First Arts standard of the Calcutta University, is a private institution founded in 1883 by a Hindu *zamindār* in memory of his father. It had 359 students on the rolls in 1904, and is self-supporting. The medical school was established in 1875 and is subsidized by Government. The present building was constructed in 1889 at a cost of Rs. 64,000, raised by public subscription, and is provided with lecture theatres, dissection rooms for male and female students, and a museum. In 1904 the students numbered 191, including 5 women; the Civil Surgeon is the Superintendent, and he is assisted by 4 teachers (assistant surgeons), 4 assistant teachers (civil hospital assistants), and a taxidermist. The course extends to four years, and practical instruction is given in the wards of the Mitford Hospital; 24 scholarships and as many free studentships are awarded annually to successful students. The Madrasa, established in 1874, comprises two departments—Arabic and Anglo-Persian—the former teaching Arabic up to the highest standard and also Persian and Urdū. In 1904 there were 371 students in the Arabic and 242 in the Anglo-Persian department. Three-fifths of the expenditure is met from the Mohsin Endowment Fund, and the balance from fees; there is a boarding-house with accommodation for 38 boarders. A survey school was established in 1886, and is equipped with a workshop where carpentry and blacksmith's work are taught to the students, who in 1901 numbered 104. Finally, the Eden girls' school, established in 1878, has 117 pupils on its rolls.

Dacca is the head-quarters of an Inspector of Works and an Executive Engineer. An Engineering college is under construction. A Roman Catholic church built in 1815 has a convent and orphanage. A Protestant church (St. Thomas's) was erected in 1819 and consecrated in 1827.

The Eastern Bengal Volunteer Rifles have their head-quarters at Dacca, with detachments at Chittagong, Comilla, Fenny, Barisāl,

Mymensingh, and Nārāyanganj. The corps comprises six companies, including one mounted, one cadet, and one reserve company, and had in 1903–4 an enrolled strength of 325.

The Central jail is the largest in Eastern Bengal, having accommodation for 1,183 prisoners. The convicts are employed on cloth-weaving, tailoring, oil-manufacture, bread-making, carpet-weaving, bamboo and cane-work, and carpentry. The cloth is made into uniforms for the village watch and prison clothing, and the other products are sold locally or in Calcutta.

The Mitford Hospital, named after its founder, a former Collector and Judge of the District, was opened in 1858, and is partly supported by funds bequeathed by him. In 1903 it had accommodation for 170 in-patients (133 males and 37 females); the total number of cases treated was 31,110, of whom 3,384 were in-patients, and 4,181 operations were performed, the total expenditure being Rs. 54,000, of which Rs. 33,000 was spent on buildings and repairs. There is also a Lady Dufferin Zanāna Hospital with four beds, where 2,704 persons were treated during the year. The Lunatic Asylum was founded in 1815, and has accommodation for 217 males and 45 females; it receives patients from the Dacca and Chittagong Divisions and from the Districts of Sylhet and Cāchār. The average number of lunatics annually admitted is 52, and the average daily strength is 232; nearly half the inmates are criminals. The annual cost is about Rs. 26,000.

Dadhālia.—Petty State in MAHĪ KĀNTHA, Bombay.

Dādri Tahsīl.—Southern *tahsīl* of the Jīnd *nizāmat* and State, Punjab, lying between 28° 24′ and 28° 48′ N. and 75° 55′ and 76° 30′ E., with an area of 591 square miles. It forms a compact block of territory, 30 miles long by 23 broad, south of the Jīnd *tahsīl*, from which it is separated by the British *tahsīl* of Rohtak. It is bordered on the south and west by Dujāna State, the Bāwal *nizāmat* of Nābha, the Mohindargarh *nizāmat* of Patiāla, and the Lohāru State, while on the west lies the British District of Hissār, and on the east that of Rohtāk. It lies partly in Hariāna, and partly in the Bāngar, a tract of sandy soil, interspersed with shifting sandhills, and has a hot, dry climate, being exposed to violent sand-storms from the Bīkaner desert in the hot season. The population in 1901 was 92,368, compared with 101,141 in 1891. The *tahsīl* contains three towns, DĀDRI (population, 7,009), the head-quarters, KALIĀNA (2,714), and Baund (3,735); and 181 villages. The decrease in population is due to emigration caused by the famines of 1896–7 and 1899–1900. The land revenue and cesses amounted in 1903–4 to 2·4 lakhs.

Dādri Town.—Head-quarters of the *tahsīl* of the same name in the Jīnd State, Punjab, situated in 28° 35′ N. and 76° 20′ E., 87 miles

south-west of Delhi, and 60 south of Jīnd town, on the Rewāri-Bhatinda branch of the Rājputāna-Mālwā Railway. Population (1901), 7,009. The town, which derives its name from *dādar* = 'frog,' lies in a depression. It is said to be an ancient place, but its history is unknown. In 1857 it was governed by Nawāb Bahādur Jang, a relative of the Nawāb of Jhajjar, and was confiscated for his disloyalty. It was then conferred on the Rājā of Jīnd as a reward for his services in the Mutiny. A tank, the Someshwara, and other buildings constructed by Sīta Rām, treasurer of the emperor Muhammad Shāh, are its only antiquities. The municipality has an income of Rs. 11,400, chiefly from octroi. Trade was ruined by the exactions of the Jhajjar Nawābs, and competition with Bhiwāni has prevented its recovery. The town is noted for its leathern goods, and there is some turnery.

Dādū Tāluka.—*Tāluka* of Lārkāna District, Sind, Bombay, lying between 26° 34′ and 27° 3′ N. and 67° 41′ and 68° 3′ E., with an area of 294 square miles. The population in 1901 was 55,318, compared with 55,454 in 1891. The *tāluka* contains 53 villages, of which Dādū is the head-quarters. The density, 188 persons per square mile, is much above the District average. Land revenue and cesses amounted in 1903–4 to 1½ lakhs. The Indus runs along the eastern boundary, and the area is constantly changing owing to the vagaries of the river. The lands bordering on the river are annually inundated and produce fine crops of wheat and gram. Much of the *tāluka* is watered by small watercourses supplied directly by the Indus. The western portion is supplied by the Western Nāra Canal, either directly or by its branches, the Makki Wah and Kadan Wah. The Phitto Wah (18 miles) is the only other canal of importance. The area west of the railway has few irrigational facilities.

Dafābhum.—Mountains in Lakhimpur District, Eastern Bengal and Assam. *See* DAPHĀBUM.

Daflā Hills.—A section of the Himālayan range lying north of Darrang and Lakhimpur Districts, Eastern Bengal and Assam, between the Rangānadī on the east and the Bhareli on the west and occupied by the Daflā tribes. These tribes are of Tibeto-Burman origin, and are of short, sturdy physique, with a Mongolian type of countenance. They are much less united than the Akās, their neighbours on the west, and are thus less formidable to Government. In the time of the Ahom Rājās the Daflas were accustomed to levy blackmail upon the people of the plains; and this custom was the cause of much trouble till 1852, when they were finally induced to commute their claims for a money payment. In 1872 they raided a village of Daflās in Darrang District, whom they considered to be responsible for the introduction of an epidemic into the hills, killed two persons and carried off forty-four captives. A blockade was instituted, but proved ineffectual; and

a military force was sent into the hills in 1874–5, which attained the desired object of liberating the prisoners who survived. Since that date the tribe has given little trouble, and though individuals have occasionally been carried off from the plains, their release has been effected without difficulty.

Daflāpur (*Daphlāpur*).—Petty State in the Political Agency of Bijāpur, Bombay. *See* BIJĀPUR AGENCY.

Dagshai.—Hill cantonment in Simla District, Punjab, situated in 30° 53′ N. and 77° 4′ E., overlooking the cart-road from Kālka to Simla, and 40·4 miles from the latter station. The land was given in 1847 by the Mahārājā of Patiāla. Dagshai is the head-quarters of a British infantry regiment, and a detachment of British infantry from the Ambāla garrison is quartered there during the summer months. Population (March, 1901), 2,159.

Dāhānu Tāluka.—Northernmost *tāluka* of Thāna District, Bombay, lying between 19° 49′ and 20° 22′ N. and 72° 39′ and 73° 9′ E., with an area of 644 square miles, including the petty subdivision (*petha*) of Umbargaon. The population in 1901 was 129,815, compared with 134,395 in 1891. The density, 202 persons per square mile, is slightly less than the District average. There are 212 villages but no town, Dāhānu being the head-quarters. Land revenue and cesses amounted in 1903–4 to 1·9 lakhs. The *tāluka* has a picturesque aspect, most of the interior being occupied by forest-clad hills in small detached ranges of varying height. Towards the coast are broad flats, hardly above sea-level, and seamed by tidal creeks. The climate of the interior is unhealthy, and though that of the coast is generally pleasant and equable, after the rains it becomes malarious.

Dāhānu Town.—Seaport in the *tāluka* of the same name in Thāna District, Bombay, situated in 19° 58′ N. and 72° 43′ E., 78 miles from Bombay and 2 miles from Dāhānu Road station on the Bombay, Baroda, and Central India Railway. Population (1901), 4,573. Dāhānuka is named in the cave-inscriptions of Nāsik (A.D. 100). It was held by the Portuguese, and is mentioned in their annals as celebrated for its image of Nossa Senhora des Augustas, which had wrought many miracles. There is a small fort on the north bank of the Dāhānu river or creek. A large quantity of wood passes through this port from the Savta *bandar*, 6 miles up the river. The town contains a Sub-Judge's court, and two schools for boys with 358 pupils and one for girls with 60.

Dāhar Lake.—A picturesque sheet of water near Sāndī in the Hardoī District of Oudh, with fine mango groves on its banks and lotus-leaves floating on its waters, situated in 27° 19′ N. and 70° 58′ E. It is about two miles long and three-quarters of a mile wide. Fish abound in it, and in the cold season water-fowl are plentiful. The

depression in which this lake is situated was probably part of an old bed of the Rāmgangā, which now flows some distance to the west.

Dahida.—Petty State in KĀTHIĀWĀR, Bombay.

Dainhāt.—Town in the Kātwa subdivision of Burdwān District, Bengal, situated in 23° 36′ N. and 88° 11′ E., on the right bank of the Bhāgīrathi. Population (1901), 5,618. Brass and bell-metal work is manufactured, and weaving is also carried on; there is some trade in salt, jute, grain, English cloth, cotton, and tobacco. Dainhāt was constituted a municipality in 1869. The income during the decade ending 1901–2 averaged Rs. 3,900, and the expenditure Rs. 3,500. In 1903–4 the income was Rs. 5,400, chiefly derived from a tax on persons (or property tax); and the expenditure was Rs. 4,900.

Daira Dīn Panāh.—Village in the Sanāwān *tahsīl* of Muzaffargarh District, Punjab, situated in 30° 33′ N. and 70° 59′ E. Population (1901), 2,034. It contains the shrine of Dīn Panāh, a Bukhārī Saiyid, who died in 1603. The tomb is a fine domed building, covered with blue and white tiles, and attracts large crowds of worshippers.

Dājal.—Town in the Jāmpur *tahsīl* of Dera Ghāzi Khān District, Punjab, situated in 29° 34′ N. and 70° 24′ E., at the mouth of the Chāchar pass and 48 miles south of Dera Ghāzi Khān town. Population (1901), 6,213. The town first rose to importance under the rule of the Nāhars, from whom it was wrested by Ghāzi Khān, and subsequently fell into the hands of the Khāns of Kalāt. A considerable volume of trade used to pass through Dājal from the Chāchar pass, but it has now much diminished. A good deal of oil is still pressed and exported. With the adjoining village of Naushahra, the town forms a municipality, created in 1873. The income during the ten years ending 1902–3 averaged Rs. 6,800, and the expenditure Rs. 6,900. The income in 1903–4 was Rs. 9,100, chiefly from octroi; and the expenditure was Rs. 9,200.

Dakhin.—Tract in the centre of Peninsular India. *See* DECCAN.

Dakhinpāt.—Village in Sibsāgar District, Eastern Bengal and Assam, situated in 26° 55′ N. and 94° 16′ E., on the right bank of the Brahmaputra, in the Mājuli island. It is the site of a Vaishnavite *sattra*, or priestly college, whose Gosain, or high priest, ranks second only to the Auniāti Gosain in the estimation of the Assamese. These Gosains exercise immense influence over the villagers, but they exercise it wisely and well. They are loyal supporters of the Government, and free from the bigotry that is sometimes found in spiritual leaders of the people. The college is said to have been founded in the sixteenth century, and is supported by voluntary contributions and by grants of revenue-free land covering over 12,000 acres, made by the Ahom Rājās and confirmed by the British Government. The site of the *sattra* is extremely picturesque. It consists of a large quadrangle formed by the

lines of barracks occupied by the monks, and containing several tanks whose banks are shaded by tall trees. None of the buildings is, however, of masonry. The Dakhinpāt Gosain is the only person in Assam exempted from personal attendance in the civil courts.

Dakhin Shāhbāzpur.—Large island in the Meghnā estuary, forming a subdivision of Backergunge District, Eastern Bengal and Assam, lying between 22° 6′ and 23° 2′ N. and 90° 35′ and 91° 2′ E., with an area of 612 square miles. The population in 1901 was 270,233, compared with 258,450 in 1891, the density being 442 persons per square mile. It contains 447 villages, at one of which, BHOLĀ, the head-quarters are now situated. The island is formed of the silt brought down by the Meghnā, whose strong bore at spring-tides impinges on its east face, flooding all the watercourses and creeks. To the north and east, land is being cut away by the river, many homesteads with their palm groves annually disappearing, while elsewhere, especially towards the west, large alluvial accretions are continually forming. The island is peculiarly liable to the ravages of storm-waves and cyclones, and was devastated by the cyclone of 1876 (*see* BACKERGUNGE DISTRICT), which swept away almost the entire population of DAULATKHĀN, the former head-quarters.

Dākor.—Place of pilgrimage for Hindus, in the Thāsra *tāluka* of Kaira District, Bombay, situated in 22° 45′ N. and 73° 11′ E., on the Godhra-Ratlām branch of the Bombay, Baroda, and Central India Railway, 9 miles north-east of Anand. Population (1901), 9,498. The chief object of interest at Dākor is the temple of Ranchodji or Krishna. The image of the deity was brought from Dwārka by Bodhāno, a Rājput. There are monthly meetings, but the largest gatherings take place about the full moon in October–November, when as many as 100,000 pilgrims assemble. The municipality was established in 1864. The receipts during the decade ending 1901 averaged Rs. 19,000. In 1903–4 the income was Rs. 17,000, derived chiefly from house and pilgrim taxes. The town contains a dispensary and five schools (four for boys, including an English middle school, and one for girls), attended by 364 and 74 pupils respectively.

Dal Lake.—Lake in Kashmīr State, situated close to Srīnagar, measuring about 4 miles by 2½, and one of the most beautiful spots in the world. The mountain ridges, which are reflected in its waters as in a mirror, are grand and varied, the trees and vegetation on the shores of the Dal being of exquisite beauty. In the spring the fresh green tints of the trees and the mountain-sides are refreshing to the eye, but it is perhaps in October that the colours of the lake are most charming. The willows change from green to silver grey and delicate russet, with a red tone on the stems and branches, casting colours on the clear water of the lake, which contrast most beautifully with the rich olives

and yellow greens of the floating masses of water-weed. The *chinārs* are warm with crimson, and the poplars stand up like golden poles to the sky. On the mountain-sides the trees are red and gold, and the scene is one of unequalled loveliness. Looking towards the city from the lake the famous hill, the Takht-i-Sulaimān, stands on the left; and to the right the hill of Harī Parbat, with its picturesque fort full of recollections of the grandeur of past times. Between these hills lies Srīnagar, and away to the west are the snow-capped mountains. The Dal is clear, and the people say that the shawls of Kashmīr owed much of their excellence to being washed in its soft waters. Nature has done much for the lake, but the Mughal emperors exerted themselves to enhance its natural beauties; and though the terraced gardens of Jahāngīr and Shāh Jahān, with the prim rows of cypress through which formal cascades tumble down to the edge of the Dal, may not please the European landscape-gardener, the magnificent plane-trees which the great Mughals bequeathed to posterity have added a distinctive charm. The park of plane-trees known as the Nasīm Bāgh, 'the garden of breezes,' which was planted in Akbar's time, is the most beautiful of all. Nothing is perhaps more striking than the ruined Pari Mahal standing grandly on a spur of the Zebanwan mountain, which was built by Dārā Shikoh for his tutor, Mullā Shāh, whose tomb is at Mulshāhi Bāgh, near the entrance of the Sind valley. There are two small islands on the lake, known as the Sona Lanka or 'golden isle' and the Rūpa Lanka or 'silver isle.' The original of the name Dal is uncertain. One authority states that the name signifies in the Kashmīri language 'lake,' and that there is a Tibetan word *dal* which means 'still.' In the chronicle of Srīvara the lake is called Dala. The cultivation on the lake is peculiar and interesting.

Dalhousie.—Hill sanitarium attached to the Pathānkot *tahsīl* of Gurdāspur District, Punjab, situated in 33° 32′ N. and 75° 58′ E. Population (1901), 1,316. The station occupies the summits and upper slopes of three mountain peaks on the main Himālayan range, east of the Rāvi river, lying 51 miles north-west of Pathānkot, and 74 miles from Gurdāspur, at an elevation above the sea of 7,687 feet. The cantonments lie below at Balūn, and still lower down is Bani Khet, where a detachment and a wing of a British regiment are stationed during the hot season. The scenery compares favourably with that of any hill station in the Himālayan range. To the east the granite peak of Dain Kūnd, clothed with dark pine forests, and capped with snow even during part of the summer, towers to a height of 9,000 feet; while beyond, again, the peaks of the Dhaola Dhār, covered with perpetual snow, shut in the Kāngra valley and close the view in that direction. The hills consist of rugged granite, and the houses are perched on a few gentler slopes among the declivities.

The first project for the formation of a sanitarium at this spot originated with Colonel Napier (Lord Napier of Magdāla) in 1851. In 1853 the British Government purchased the site from the Rājā of Chamba, and the new station was marked out in 1854. No systematic occupation, however, took place until 1860. In that year Dalhousie was attached to the District of Gurdāspur, the road from the plains was widened, and building operations commenced on a large scale. Troops were stationed in the Balūn barracks in 1868, and the sanitarium rapidly acquired reputation. The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 23,000, and the expenditure Rs. 22,000. The income in 1903–4 was Rs. 23,500, chiefly derived from taxes on houses and land (Rs. 8,800), water rate (Rs. 3,400), and municipal property, &c. (Rs. 4,800); and the expenditure was Rs. 21,400. The income and expenditure of cantonment funds during the ten years ending 1903–4 averaged Rs. 6,800 and Rs. 6,200 respectively. Water-works have been constructed at a cost of about Rs. 60,000. The principal educational institution is the Dalhousie Convent School for girls, and there are a church and a hospital. Dalhousie is the head-quarters of the Commissioner of the Lahore Division during part of the summer months, and an Assistant Commissioner is posted to the place during the hot season. The Punjab Banking Company maintains a branch here in the season.

Dalma.—The highest hill in Mānbhūm District, Bengal, situated in the head-quarters subdivision in 22° 53′ N. and 86° 14′ E., rising to a height of 3,407 feet above sea-level. It has been described as the rival of Parasnāth; but it lacks the bold precipices and commanding peaks of that hill, and is merely a long rolling ridge rising gradually to its highest point. Its slopes are covered with dense forest, but are accessible to beasts of burden. The chief aboriginal tribes living on the hill are the Khariās and Pahārias.

Dalmau Tahsīl.—South-western *tahsīl* of Rāe Barelī District, United Provinces, comprising the *parganas* of Dalmau, Sarenī, and Khiron, and lying between 25° 57′ and 26° 22′ N. and 80° 41′ and 81° 21′ E., along the Ganges, with an area of 472 square miles. Population fell from 275,786 in 1891 to 270,900 in 1901. There are 575 villages, but only one town, DALMAU (population, 5,635). The demand for land revenue in 1903–4 was Rs. 4,46,000, and for cesses Rs. 71,000. The density of population, 574 persons per square mile, is below the District average. Along the Ganges lies a strip of fertile alluvial soil, the lower stretches of which are flooded in the rains. The upland area is a rich loam, turning to sandy soil near the west, where it is crossed by the Lonī, an affluent of the Ganges, and to clay in the north, where a chain of *jhīls* marks an old river-bed. In 1903–4 the area under cultivation was 256 square miles, of which 153 were irri-

gated. Wells supply more than two-thirds of the irrigated area, and tanks or *jhīls* the remainder.

Dalmau Town.—Head-quarters of the *tahsīl* of the same name, Rāe Barelī District, United Provinces, situated on the Ganges in 26° 4′ N. and 81° 3′ E. Population (1901), 5,635. One tradition asserts that the town was founded by Dal Deva, Rājā of Kanauj; while another relates that Dal was a Bhar, and the latter seems the more probable story. The Muhammadans state that Dalmau was captured by Saiyid Sālār, and several early tombs still exist. Fīroz Shāh Tughlak founded a school here, and an *īdgāh* dates from the same reign. At the close of the fourteenth century the power of the Bhars was revived, and an attempt by the Bhar Rājā to obtain the hand of a Saiyid girl led to the intervention of Ibrāhīm Shāh of Jaunpur, who assaulted and took the fort. Ibrāhīm Shāh restored the fort, and a garden and well are pointed out as having been constructed by him. In the former is the tomb of Ibrāhīm's grandson, Muhammad, who fell in battle with his brother, Husain, after a brief reign. The town was of some importance under the rule of Jaunpur, and throughout the Mughal period was held by the Muhammadans, who enriched it with mosques and other buildings. In the eighteenth century Nawāb Shujā-ud-daula built a house here; but the resumption of revenue-free grants in the neighbourhood and a Marāthā raid ruined the inhabitants. Dalmau stands on a steep cliff overlooking the Ganges. The fort appears to have been built on the ruins of two Buddhist *stūpas*, and with its tottering pavilions and crumbling battlements forms one of the most picturesque objects on the banks of the great river. On the east is a fine gateway erected by Ibrāhīm Shāh and largely composed of fragments of earlier temples. The interior contains buildings dating from the time of Akbar and Shāh Jahān. The town is administered under Act XX of 1856, with an income of about Rs. 900. Besides the usual offices, it contains a *munsifī* and a dispensary. There is a small manufacture of glass phials for use by pilgrims to contain Ganges water; and oilseeds, grain, and poppy seeds are exported to Cawnpore. A large fair takes place in the autumn, which is attended by 150,000 persons; and a primary school has 55 pupils.

Dalmī.—Site of ruins in the head-quarters subdivision of Mānbhūm District, Bengal, situated in 23° 4′ N. and 86° 2′ E., on the Subarnarekhā. The ruins include the remains of a fort and of many brick-built temples. They are representative examples of post-Muhammadan brick temples, but many of the bricks and of the carved stone images formerly found here have been carried away by the villagers. An inscribed figure of Āditya is in fine order, and there is also a small figure of a ten-armed Devī.

Daltonganj.—Head-quarters of Palāmau District, Bengal, situated in 24° 3′ N. and 84° 4′ E., on the North Koel river. Population (1901), 5,837. It is named after Colonel Dalton, at one time Commissioner of Chotā Nāgpur. The town, which lies to the immediate south of the Daltonganj coal-field (*see* PALAMAU DISTRICT), and is connected by a branch line with the East Indian Railway system, possesses a brisk local trade. Daltonganj was constituted a municipality in 1888. The income during the decade ending 1901–2 averaged Rs. 5,700, and the expenditure Rs. 4,900. In 1903–4 the income was Rs. 12,000, derived from various sources, such as a tax on persons (or property tax), a tax on houses and lands, the receipts from markets, and a conservancy rate; and the expenditure was Rs. 9,000.

Damalcheruvu Pass.—Pass in the Chandragiri *tāluk* of North Arcot District, Madras, situated in 13° 29′ N. and 79° 3′ E. It leads from the Carnatic to the Mysore plateau, and was consequently the scene of frequent fighting in the wars of the eighteenth century. The Marāthā chief Sivajī made his first descent upon the Carnatic by this route. Here in 1740 was fought the battle between the Marāthās and the Nawāb Dost Alī, in which the latter was defeated and killed. A peculiar earthen embankment crosses the road which leads through the pass, and continues over the hills on either side. It is said to extend to Tirupati on the one side and to Yelagiri in Salem District on the other, and to have been built long ago by two neighbouring kings to mark the boundaries of their realms.

Damān.—Portuguese settlement and town in Gujarāt, within Thāna District of the Bombay Presidency, about 100 miles north of Bombay. Including the *pargana* of Nagar Havili, the area is 149 square miles. The settlement of Damān is bounded on the north by the Bhagwān river, on the east by British territory, on the south by the Kalem river, and on the west by the Gulf of Cambay. Damān town is situated in 20° 25′ N. and 72° 53′ E. The settlement is composed of two portions: namely, Damān proper, which is divided by the Damāngangā into *pargana* Naer or *Damān Grande*, and *pargana* Calana Pavori or *Damān Pequeno*; and the detached *pargana* of Nagar Havili, separated from it by a narrow strip of British territory, 5 to 7 miles in width, and intersected by the Bombay, Baroda, and Central India Railway. The town of Damān was sacked by the Portuguese in 1531, rebuilt by the natives, and retaken in 1558 by the Portuguese, who made it one of their permanent establishments in India. They converted the mosque into a church, and have since built eight other places of worship. Damān proper lies at the entrance of the Gulf of Cambay, and contains an area of 22 square miles, and 26 villages, with a population (1900) of 17,391. This portion of the settlement was conquered from Bofata on February 2, 1559, by the Portuguese under Dom Constantino de

Braganza. The *pargana* of Nagar Havili, situated towards the east, has an area of 60 square miles, with a population (1900) of 24,280, and is likewise subdivided into two parts, called Eteli Pati and Upeli Pati. It was ceded to the Portuguese by the Marāthās, in indemnification for piratical acts committed against a ship carrying a flag of the former nation, in accordance with the treaty signed at Poona on January 6, 1780. Damān suffered severely from the plague in 1897 and subsequent years.

The principal rivers are: the Bhagwān, forming the northern boundary of the settlement; the Kalem, running along the southern boundary; and the Sandalkhāl or Damānganga ('border Ganges'), a deep navigable stream, rising in the Ghāts about 40 miles east of Damān proper. All these fall into the Gulf of Cambay. The Damānganga has a bar at its mouth, dry at the lowest ebb tides, but with 18 to 20 feet of water at high tides. Outside this bar is a roadstead, where vessels of 300 to 400 tons may ride at anchor and discharge cargo. Damān has long enjoyed a high celebrity for its docks and ship-building yards, due chiefly to the excellent teak with which the country is stocked. The climate is generally healthy throughout the year.

The total population of the settlement in 1900, including absentees and temporary residents, was 41,671. According to the Census of 1850 the population of Damān proper was returned at 33,559; it is now reduced to 17,391. Of the total population, Christians number 1,563. The number of houses amounts to 8,971; but only a very few are of any size or pretensions. The native Christians adopt the European costume. Some of the women dress themselves after the present European fashion, while others follow the old style once prevalent in Portugal and Spain, and wear a petticoat and mantle.

The soil is moist and fertile, especially in the *pargana* of Nagar Havili. The principal crops are rice, wheat, the inferior cereals common to Gujarāt, and tobacco. Despite the ease of cultivation, only one-twentieth part of the territory is under tillage.

The settlement contains no minerals, but possesses stately forests in the *pargana* of Nagar Havili. About two-thirds of these forests consist of teak; the other timber trees include *sadara*, *khair*, *sissoo*, *lāl khair* (*Acacia Sundra*), *tiwas* (*Dalbergia ougeinensis*), *siwana* (*Gmelina arborea*), *dambora* (*Conocarpus latifolia*), *hedu* (*Nauclea cordifolia*), *asana* (*Bridelia spinosa*), *temburni* (*Diospyros montana*), and *babūl*. The forests are not conserved, and the extent of land covered by each kind of timber has not been precisely determined.

Before the decline of the Portuguese power in the East, Damān carried on an extensive commerce, especially with the eastern coast of Africa, to which the cotton fabrics made in Gujarāt were largely

exported in vessels carrying the Portuguese flag. From 1817 to 1837 there was a flourishing trade with China in opium imported from Karāchi. But since the conquest of Sind by the British, the transport of opium has been prohibited, and thus Damān has been deprived of its chief source of wealth. In old days Damān was noted for its weaving and dyeing. The former industry is still carried on to a limited extent, chiefly by the wives of Musalmān *khalāsis* or sailors, while the latter is almost extinct. The piece-goods, made from a mixture of English and country twist, are of a quality and pattern worn only by the natives of Goa, Mozambique, and Diu, to which places they are exported. Mats and baskets of palm-leaves and bamboo are manufactured on a large scale. A noteworthy feature in connexion with the industrial occupations of the place is its deep-sea fishing. The boats make for the coast of Kāthiāwār, near Diu, where they remain for some months, and return laden with salted fish cured on board. The total imports in 1903-4 were valued at $1\frac{1}{2}$ lakhs, and the exports at Rs. 42,000.

The territory of Damān forms, for administrative purposes, a single district, and has a municipal chamber or corporation. It is ruled by a Governor invested with both civil and military functions, subordinate to the Governor-General of Goa. The judicial department is superintended by a judge, with an establishment composed of a delegate of the attorney-general, and two clerks. In the *pargana* of Nagar Havili the greater part of the soil is the property of the Government, from whom the cultivators hold their tenures direct. A tax is levied on all lands, whether alienated or the property of the state. There is, however, no fixed rate of assessment, as the tax is regulated by a general estimate of the productiveness of each village.

The total revenues of Damān in 1903-4 amounted to nearly 2 lakhs, of which the larger portion was derived from the *pargana* of Nagar Havili. The chief sources of revenue are land-tax, forests, excise, and customs duties. The expenditure in the same year was $1\frac{1}{4}$ lakhs. The public force, both military and police, consisted of 644 officers and men.

The settlement of Damān has two forts, situated on either side of the river Damāngangā. The former is almost square in shape, and built of stone. It contains, besides the ruins of the old monastic establishments, the Governor's palace, together with the buildings appertaining to it, military barracks, hospital, municipal office, courthouse, jail, two modern churches, and numerous private residences. On the land side this fort is protected by a ditch crossed by a drawbridge, while at its north-west angle extends the principal bastion, which commands the entrance to the harbour. It is occupied by the Governor and his staff, the military establishments, officers connected with the

Government, and a few private individuals; all are Christians. The smaller fort, which is a more recent structure, is placed by the Portuguese under the patronage of St. Jerome. Its form is that of an irregular quadrilateral, enclosed by a wall somewhat higher than that of the other fort. The principal buildings within it are a church, a parochial house, and a mortuary chapel surrounded by a cemetery. Both the forts have brass and iron cannon on the walls, some of which are mounted, and others either attached to old carriages or lying on the ground.

Dāman-i-koh ('Skirts of the hills').—A tract of hilly country in the Dumkā, Rājmahāl, Pākaur, and Goddā subdivisions of the Santāl Parganas District, Bengal, with an area of 1,351[1] square miles. When the East India Company first assumed the Dīwāni of Bengal in 1765, the tribes who inhabited this tract were practically independent. They soon forced themselves, however, on the notice of Government by marauding inroads into the plains, but between 1779–84 Augustus Clevland, Collector of Bhāgalpur, succeeded in winning their confidence and reducing them to order. He allotted stipends to the tribal headmen, recruited a corps of Hill Rangers among the Pahārias, and founded special tribunals presided over by tribal chiefs. Government, to pacify the country, took practical possession of it to the exclusion of the *zamīndārs* who had previously been its nominal owners. The tract was therefore omitted from the Permanent Settlement, and finally in 1823 Government definitely asserted its title to the hills and the fringe of uninhabited country lying at their feet. Mr. Ward was appointed to demarcate the limits of the Government possession, and the rights of the *jāgīrdārs* over the central valley of Mānjhuā were finally resumed in 1837. A Superintendent of the Dāman was appointed in 1835; and he encouraged the Santāls, who had begun to enter the country about 1820, to clear the jungle and bring the valleys under cultivation. The Pahārias clung to the tops and slopes of the hills, which they cultivated by *jhūming*; the valleys offered a virgin jungle to the axes of the Santāls, who swarmed in from Hazāribāgh and Mānbhūm. On the heels of the Santāls came the Bihāri and Bengali *mahājans* or money-lenders. The simple and improvident Santāls found the lands which they had recently reclaimed passing into the hands of others, largely owing to the action of the law courts; and in 1855 they rose in rebellion. The subsequent history of the Dāman-i-koh will be found in the article on the SANTĀL PARGANAS, of which it now forms a part. It is still reserved exclusively for the hill tribes who were first found in it, and for the Santāls and other cognate races who began to

[1] In the *Census Report* of 1901 the area of the Dāman-i-koh was taken as 1,422 square miles; the figure given above is the result of inquiries made by the Settlement officer.

migrate into it about 1820; foreigners are not allowed to enter it without special permission. The total population in 1901 was 358,294 persons, residing in 1,876 villages, compared with 353,413 in 1881. The great majority of these were Animists (245,971) and Hindus (96,299), though there were also some Muhammadans (13,573) and Christians (2,451). Santāls (226,540) largely outnumbered all the other races represented, of whom the most numerous were the Māle (Sauriā) with 24,226 persons. Dāman-i-koh forms a separate Government estate and is now under resettlement.

Dam-Dama.—Cantonment and town in the Twenty-four Parganas District, Bengal. *See* DUM-DUM.

Dāmodar.—River of Bengal, which rises in the Chotā Nāgpur watershed in 23° 37′ N. and 84° 41′ E., and, after a south-easterly course of about 368 miles, falls into the Hooghly in 22° 17′ N. and 88° 5′ E., just above the ill-famed James and Mary Sands, a shoal which it has helped to form. Its sources are a two-pronged fork, the southern one, the true source, being in the Torī *pargana* of Palāmau District, and the northern one, the Garhi, in the north-west corner of Hazāribāgh. After a course of about 26 miles as wild mountain streams, the two prongs unite just within the western boundary of Hazāribāgh; and the combined river flows through that District almost due east for 93 miles, receiving the Kunur, Jamuniā, and other affluents from the watershed on the north-west. It continues its course still eastward through Mānbhūm District, and receives its chief tributary, the BARĀKAR, also from the north, at the point where it leaves that District and touches Burdwān. A little lower down the united stream becomes navigable, and assumes the dignity of an important river. At the point of junction with the Barākar the Dāmodar turns to the south-east, separating the Asansol subdivision of Burdwān from Bānkurā District, and then, entering Burdwān District, continues south-east to a little beyond Burdwān town. At Jujoti, 8 miles above Burdwān town, water is supplied to the EDEN CANAL through sluices in the left bank of the river. Soon after leaving Burdwān town, the Dāmodar turns sharply to the right and flows almost due south for the remainder of its course through Burdwān and Hooghly Districts. Shortly before entering the latter it assumes the deltaic type and, instead of receiving affluents, throws off distributaries. The Dāmodar thus exhibits, in its comparatively short course, the two great features of an Indian river. In the earlier part of its career it has a rapid flow, and brings down large quantities of silt. At the point of junction of the two prongs, on the western border of Hazāribāgh District, the united stream starts at an elevation of 1,326 feet above sea-level; but in its course of 93 miles through Hazāribāgh its fall averages 8 feet per mile, and it leaves the District with an elevation of only 582 feet to be distributed

over its remaining course of 250 miles. The fall continues rapidly through Mānbhūm and north-western Burdwān, in the latter of which Districts the Dāmodar deposits large and shifting sandbanks. In south Burdwān and Hooghly it loses the greater part of its flood-volume, which finds a way across country to the RŪPNĀRĀYAN river; and it declines into a sluggish deltaic channel, conveying what is left of the remainder of its water and silt to the Hooghly river, which it joins opposite Faltā, 35 miles below Calcutta. The Rūpnārāyan, a southern congener of the Dāmodar from nearly the same watershed, also falls into the Hooghly a few miles lower down. Both streams enter the great river at a sharp angle from the west, and the JAMES AND MARY SANDS have been thrown up between their mouths. During the dry season, the Dāmodar is navigable only as far as Amtā in Howrah District, about 25 miles from its mouth, by native boats of 10 tons burden at neap, and of 20 tons at spring-tides. In the rainy season it is navigable nearly to its junction with the Barākar in the north-western extremity of Burdwān District.

The Dāmodar formerly joined the Hooghly at Nayā Sarai, 39 miles above Calcutta, and its old mouth is still marked by the Kānsonā Khāl; but during the eighteenth century its floods gradually forced a larger passage for themselves to the southwards, and in 1770 a flood almost totally destroyed Burdwān town, ruined the whole line of embankments, and caused a severe local famine. The change in the course of the Dāmodar caused a marked deterioration of the upper Hooghly, which its waters had helped to scoop out and to keep clear, and the old trading settlements above Calcutta are now (see the article on the HOOGHLY RIVER) inaccessible to sea-going ships even of small tonnage.

The Dāmodar is subject to sudden freshes which used to desolate the surrounding country in Burdwān District. In 1823 and again in 1855 inundations swept away the riverside villages, and the terror of a similar calamity has deterred the people from building on the deserted sites. The floods of 1823 lasted for three days, during which the fortunate owners of brick tenements camped on their roofs. The old landmarks of the peasants' holdings were swept away, and many years of bankruptcy and litigation ensued. Since the construction of the East Indian Railway, which for a space follows the course of the Dāmodar, and the improvement of the river embankments which Government took over after the flood of 1855, calamities on this scale have been unknown. Both banks of the river were formerly protected by embankments, but these were continually breached by heavy floods, and 20 miles of embankments were removed from the right bank of the river between 1855 and 1859 as impossible of maintenance, and an additional length of 10 miles in 1891. The embankment on the left bank protects an

extensive area from floods, which, however, still inundate the unprotected country on the right bank. There has been much discussion about the damage caused by these floods, but the result of recent inquiries tends to show that the cost of preventive measures would be prohibitive. The Dāmodar has been bridged where it is crossed by the Bengal-Nāgpur Railway not far from its junction with the Hooghly, and it is also crossed higher up by the East Indian Railway, and again by the Bengal-Nāgpur Railway.

The Dāmodar is the object on earth most venerated by the Santāls; and the country that is most closely associated with their name, and which they apparently regard as their fatherland, lies between the Dāmodar and the Kāsai. They speak of it as their sea, and the obsequies of their dead are considered incomplete till some charred fragment of the burnt body is committed to the stream, to be borne away to the ocean.

Damoh District.—District in the Jubbulpore Division of the Central Provinces, lying between 23° 10′ and 24° 26′ N. and 79° 3′ and 79° 57′ E., with an area of 2,816 square miles. It is in the extreme north of the Province, and forms part of the Vindhyan plateau. On the west it abuts on Saugor, with which it is closely connected geographically and historically. On the south and east it is bounded by Narsinghpur and Jubbulpore; and to the north it marches with the Bundelkhand States of Pannā and Chhatarpur. The rivers and streams follow the general slope of the country and flow northward, rising near the crest of the scarp over the Narbadā, and discharging their waters into the Ken, a tributary of the Jumna. The main systems are those of the Sonār and the Beārma. The Sonār, with its principal affluent the Koprā, rises in the south of Saugor District and flows through broad valleys of open black soil country. The Beārma rises in the Vindhyan highlands south of Damoh, and traverses the most rugged and broken portion of the District. During the greater part of its course it is confined between rocky cliffs, and such valleys as open out are nowhere extensive. Its principal tributaries are the Guraiyā, Sūn, and Pathrī, with a character closely resembling its own. The Sonār and the Beārma unite just beyond the northern border of the District and pour their joint streams into the Ken. The small valley of Singrāmpur, which is cut off from the open country of Jubbulpore by the Kaimur range, possesses a drainage system of its own. The Phalkū, which waters it, flows in a southerly instead of northerly direction, and joins the Narbadā by forcing its way through an extraordinary cleft in the hills known as the Katās. The most striking natural feature of the District is undoubtedly the sheer scarp of the Vindhyan range, which for some distance overhangs the Jubbulpore plain, but turns inward

Physical aspects.

where met by the Kaimur Hills, and forms the western enclosure of the landlocked valleys of Singrāmpur and Jaberā. On an isolated buttress commanding the Jubbulpore-Damoh road stands the old hill fortress of Singorgarh. In the southern two-thirds of the District the prevailing features are low hills and scrub jungle, opening now and again into poor little upland valleys generally peopled by Gonds, and less frequently into deeper and broader beds of black soil cultivation, whence the Gonds have been ousted by Hindu immigrants. The Sonār valley in the north of the District presents, however, a complete contrast to this description, consisting of a fertile and closely cultivated plain, while lines of blue hills on the horizon are the only indication of the different character of the country on either margin of the valley. The elevation of the plain portion of the District is about 1,200 feet above the sea.

The principal rock formation is the Vindhyan sandstone of pinkish colour, lying in horizontal slabs, which commonly testify to their origin by curious ripple marks manifestly formed by the lapping of water on a sandy shore. The rocks are chiefly thick masses of sandstone with alternations of shale. The calcareous element is deficient, being represented only by a single limestone band of importance. On the Jubbulpore border of the District metamorphic rock occurs, forming the distinctive range of hills already mentioned as the Kaimur, with strata upheaved into an almost vertical position.

Of the total area of the District, 28 per cent. is included in Government forests, and at least 20 per cent. is scrub or tree jungle in private hands. Teak and *sāj* (*Terminalia tomentosa*) are the principal timber trees, and other species are *achār* (*Buchanania latifolia*), *tendū* or ebony (*Diospyros tomentosa*), and *palās* (*Butea frondosa*). Considerable patches of bamboos are scattered over the hill-sides. The villages are surrounded by trees or groves of mango, tamarind, *pīpal*, banyan, *mahuā* (*Bassia latifolia*), and similar species of a more or less useful or quasi-sacred character.

Among wild animals, *sāmbar*, *nīlgai*, spotted deer, and especially hog are numerous. Four-horned deer and mouse deer are occasionally met with. Herds of antelope are found all over the open country. Lynx and wolves may be mentioned as rare animals which have been seen. The commonest game-birds are peafowl and partridge. *Murrel* fish are numerous in the pools of the Beārma.

The climate is cold in winter and temperate in summer. Damoh town is somewhat hotter than the rest of the District in the summer months, owing to the rocky hills which overhang it. The disease of guinea-worm is prevalent. The annual rainfall at Damoh averages 51 inches, that at Hattā being several inches less. Until recent years the District has rarely suffered from deficiency of rainfall. Violent

hailstorms are not infrequent about spring-time, and the north-eastern portion of the Hattā *tahsīl* seems peculiarly liable to them. Sharp frosts are often experienced at night, especially in the small elevated valleys of the south; and, if occurring late in the season, they may turn a promising wheat crop into an absolute failure.

History.

In the tenth century Damoh was included in the territories of the Chandel Rājput dynasty of MAHOBĀ. A number of old temples are attributed to the Chandels, and Nohtā is held to have been the seat of government during their supremacy. In 1383 Damoh became part of the Delhi kingdom of the Tughlak dynasty, according to a Persian inscription on a gateway in the town; but the dominion of the Muhammadans was at this time nominal, and the country appears to have been in reality governed by Gond chieftains who had established themselves on the ruins of the old Rājput kingdoms, shattered by the Muhammadan invasions. In 1564 the Muhammadan forces under Asaf Khān invaded Damoh, and defeated the army of Rānī Durgāvati of the Garhā-Mandlā dynasty at Singorgarh. This invasion was followed by the occupation of Damoh on behalf of the emperor Akbar. The rule of the Mughals continued for about ninety years, when most of the imperial troops had to be withdrawn to oppose the rising power of the Marāthās; and Chhatarsāl, the young Bundelā Rājā of the neighbouring Pannā State, soon afterwards took advantage of the opportunity to eject the remnants of the Muhammadan garrisons, and to add Saugor and Damoh to his already extensive territory of Pannā. The Bundelā supremacy lasted for a period of about sixty years, but did not extend to the south of the District, where the small Lodhī and Gond chieftains continued to hold their estates in practical independence. In 1729 Chhatarsāl was compelled to solicit the aid of the Peshwā to repel a threatened invasion of his kingdom. In return for the assistance rendered him, he bequeathed to the Peshwā by will a third of his territories, including Saugor. The Marāthās under Govind Rao Pandit, governor of Saugor, gradually extended their influence over Damoh, which was administered by them in subordination to Saugor, until, with the deposition of the Peshwā and the annexation of the Poona dominions under Lord Hastings, Saugor and Damoh passed under British rule in 1818.

During the Mutiny the District was in a very disturbed condition for a period of about six months, nearly every Lodhī landholder throwing off his allegiance except the petty Rājā of Hatrī. The town of Damoh was for some time held by a detachment of the 42nd Regiment of Native Infantry, which remained faithful in spite of the fact that there were no British officers in the station. The town was subsequently reoccupied, but again abandoned, and garrisoned only by the friendly troops of the

Rājā of Pannā. During this period, in October, 1857, a band of the mutinous native infantry regiment from Saugor plundered the town and burnt the public buildings and all the Government records. After the departure of the mutineers the town was again occupied by the Pannā troops, and held until it was taken over by the civil officers in March, 1858.

The archaeological remains consist principally of ruined forts erected by the Rājputs, Gonds, Muhammadans, and Marāthās, who have at different periods held sway over portions of the District. The principal fort is that of Singorgarh, which is believed to have been built by the Paramāra Rājputs in the beginning of the fourteenth century, and was afterwards held and enlarged by the Gond Garhā-Mandlā princes. Narsinghgarh on the Sonār, 12 miles from Damoh, was the capital of the District during the period of Muhammadan ascendancy. It contains a fort and a mosque constructed by the Muhammadan Dīwān Shāh Taiyab, and a second fort built by the Marāthās, which was partially destroyed in 1857. At Kundalpur, 20 miles from Damoh, are situated a collection of fifty or more Jain temples, covering the hill, and gleaming white in the distance. Bāndakpur, 10 miles east of Damoh, is the site of a famous temple of Mahādeo, to which pilgrims come even from as far as Lahore. At Nohtā, 13 miles from Damoh, there are numerous remains of temples both Hindu and Jain, but they have been almost entirely destroyed, and the stone used for building; pillars, lintels, sculptures, and other fragments are found throughout the village in the walls of houses and enclosures.

Population.

The figures of population at the last three enumerations were: (1881) 312,957, (1891) 325,613, and (1901) 285,326. The increase between 1881 and 1891 was considerably less than that for the Province as a whole, owing to bad seasons in the latter part of the decade. During the last decade Damoh suffered from a succession of disastrous failures of the spring crops, and distress or famine was prevalent in several years. The District contains one town, DAMOH, and 1,116 inhabited villages. The principal statistics of population in 1901 are shown below, having been adjusted for a small transfer of area in 1902:—

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Damoh . .	1,797	1	692	183,316	102	− 6.5	7,103
Hattā . .	1,019	...	424	102,010	100	− 21.3	3,956
District total	2,816	1	1,116	285,326	101	− 12.4	11,059

The open country in the centre is most closely populated, rising to over 200 persons per square mile in the Damoh and Pathariā police circles. About 85 per cent. of the population are Hindus, 9½ per cent. Animists, 3 per cent. Muhammadans, and 2½ per cent. Jains. Practically the entire population speak the Bundelī dialect of Western Hindī, the Gonds having abandoned their own language.

The principal castes are Lodhīs, who number 13 per cent. of the population; Kurmīs, 8 per cent.; Chamārs, 12 per cent.; and Gonds, 9½ per cent. The most influential proprietors in the District are Lodhīs, and as a class they were openly disaffected in the Mutiny. They are fine, stalwart men, devoted to sport and with a certain amount of military swagger. The Kurmīs are the best agriculturists in the District. Labourers are principally Chamārs in the open country and Gonds in the hills. The latter are miserably poor and live in great squalor. At the spring harvest they come down in large numbers from the hills to the open country of Damoh and Jubbulpore, and obtain full employment for a month or two in cutting the wheat crop. On their earnings in the harvest they subsist during the hot season. About 67 per cent. of the population of the District were returned as supported by agriculture in 1901.

Christians number 90, of whom 59 are natives. An American mission of the unsectarian body known as the Disciples of Christ has been established in Damoh town.

In soil and character of cultivation the open valley of the Sonār, known as the Havelī, differs considerably from the rest of the District.

Agriculture.

The lands are here almost uniformly composed of black soil from trap or volcanic rock, of the light and friable kind known locally as *mund*. The depth is generally considerable, and degrees of productiveness vary according to the lie of the surface, sloping land, owing to denudation of the finer particles of soil, being less valuable than that in a level position, whether high or low-lying. This soil occupies more than 47 per cent. of the cultivated area, the best black soil or *kābar* covering 10½ per cent. These two soils will as a rule produce wheat. Poor brown soil called *pataruā* or 'thin,' on which inferior spring or autumn crops are grown, accounts for 29 per cent. Nearly one-third of the land occupied for cultivation is under old and new fallows, this large proportion being due partly to the necessity for resting fallows in the poorer soils, and partly to the spread of *kāns* grass (*Saccharum spontaneum*) on land which is not continually cropped.

Nearly four square miles taken from Government forests have been settled on the *ryotwāri* tenure, and pay a revenue of Rs. 4,000. The balance of the village area is held on the ordinary tenures. The princi-

pal statistics of cultivation in 1903-4 are shown below, areas being in square miles:—

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.	Forest.
Damoh . .	1,797	527	1½	469	543
Hattā . . .	1,019	335	1	329	249
Total	2,816	862	2½	798	792

Wheat, either alone or mixed with gram, now covers 278 square miles, or 29½ per cent. of the cropped area, as compared with 46 per cent. at settlement; gram occupies 70 square miles, linseed 46, rice 80, and the millet *kodon* 105. A noticeable change in cultivation in recent years is the extension of the practice of sowing wheat mixed with gram, the area under wheat alone being now comparatively insignificant. Linseed is also mixed with gram. The total area under wheat and its mixtures is at present far below the normal, and the substitution of less valuable autumn crops is an unmistakable, though perhaps temporary, sign of deterioration. *Jowār* covers nearly 15 per cent. of the cropped area, and *til* over 11 per cent. There are a number of betel-vine gardens at Damoh and Hindoriā, and the leaves are sometimes exported to Northern India. *Singhāra*, or water-nut, is largely cultivated by Dhīmars in the principal tanks, and is also exported.

The occupied area increased by 16 per cent. between the settlements of 1864 and 1894; but the newly broken-up land is of inferior quality, and no great extension of cultivation seems possible in the future. Advances under the Agriculturists' Loans Act were inconsiderable until the scarcity of 1894, but between that year and 1904 they amounted to 6·91 lakhs. During the same period Rs. 75,000 has been taken under the Land Improvement Act, principally for the embankment of fields.

Cattle are bred generally in the District, and are also imported from the valley of the Ken river in Pannā State and from Gwalior. The local cattle are small in size, and no care is usually exercised in breeding, which is carried on from immature bulls. Buffaloes are also bred to a considerable extent, the cows being kept for the manufacture of *ghī* from their milk, and the young bulls sold into Chhattīsgarh. They are sometimes used for draught, but not for cultivation. Small ponies are bred, and used for riding and pack-carriage. Those of a superior class were formerly sold in Jubbulpore as tonga-ponies and for riding purposes, but pony breeding has greatly decreased since the famines. Sheep and goats are bred in considerable numbers; country blankets are woven from sheep's wool, and the milk of goats is sold to confectioners, and *ghī* is also made from it. Goats are, however, kept principally to be sold for food.

The area irrigated varies from 2,000 to 4,000 acres, of which a maximum of 1,400 acres is under rice. The remainder of the irrigated area consists principally of market-gardens cultivated by men of the Kāchhī caste. The rice land is considered to afford some scope for the extension of irrigation. The District contains about 300 tanks, but these were principally constructed in the time of the Marāthās for drinking purposes, and are used only to a small extent for irrigation. There are also about 1,000 wells. Wheat-fields are rarely embanked to retain water in the open country of the centre of the District, but the practice is more common in the smaller valleys wedged in among the hill ranges to the south. Small embankments to cut off the surface drainage from a sloping field are made more frequently.

Government forests occupy an area of 792 square miles, situated mainly in the north and south of the District, with some scattered blocks in the centre. They are not as a rule valuable. Teak and *sāj* (*Terminalia tomentosa*) are found either scattered or in groups of limited extent, and straight stems of more than three feet in girth do not occur in any considerable numbers. The dye furnished by the lac insect is the most important minor product, and its cultivation is steadily increasing. It is largely exported to Northern India. The gross forest revenue in 1903–4 was Rs. 60,000, of which half was realized from grazing and fodder grass.

Iron ore has been found in small quantities in the north of the District near the Pannā border, but no other mineral deposits are known to exist. Good building sandstone is found in a few localities.

Trade and communications.

Country cloth is still woven by hand by Korīs and Koshtās, but since the opening of the railway the weavers have ceased to prosper. The chief weaving centres are Bānsa Kalān, Damoh, Hindoriā, Sītānagar, and Hattā. Women's *sārīs* are principally woven, men preferring the imported cloth. Mill-spun thread is now solely used. Dyeing is carried on at Damoh, Bānsa, Tarkhedā, and Aslāna, and indigo dyeing at Hindoriā. Indigenous dyes are still used, but are rapidly being ousted by foreign dyes. Household vessels are made at Damoh and Hindoriā, the material principally used being bell-metal, which is a mixture of four parts of copper to one of tin. The pottery of Damoh has some local reputation, the clay taking a particularly smooth polish; native pipe-bowls are exported to Jubbulpore. A light silver colour is obtained by the use of mica. There is an iron industry at Jaberā; ordinary agricultural implements, knives, and ornamental betel-nut cutters are sent to other Districts. At Panchamnagar native paper is manufactured, but the industry has greatly declined, and only two families are now engaged in it. The paper is used by money-lenders for their account-books. A cattle-slaughtering industry has recently been started at

Damoh, and a number of butchers have settled there. Old and infirm cattle are bought up and killed, and the dried meat, hides, horns, and hoofs are exported.

Wheat and oilseeds are the principal articles of export. In recent years the trade in the former has declined, while that in the latter has increased in importance. Teak timber for building and bamboos are sent to Northern India, and there is a considerable trade in lac, but not much in other minor forest products. *Ghī* is sent to Calcutta, but not in large quantities, and it is also received from Bundelkhand for export. The principal imports are cotton piece-goods, kerosene oil, salt, and sugar. The salt most commonly used is sea-salt from Bombay. Most of the cotton piece-goods also come from Bombay, but the finer kinds are obtained from Calcutta. Imports of kerosene oil are entirely from Bombay. *Gur* or unrefined sugar comes from Northern India, and sugar from both Mirzāpur and the Mauritius. Country tobacco is imported from Bengal. Iron implements are obtained from Chhatarpur State, and English iron is largely imported from Bombay. Copper vessels are imported from Cawnpore, and foreign glass bangles from Bombay. The most important weekly markets are those of Nohtā, Damoh, Patharia, and Hindoriā. Large annual fairs are held at Bāndakpur and Kundalpur, at which temporary shops are opened for the sale of ordinary merchandise, but cattle are not sold.

The Bīna-Katnī section of the Indian Midland Railway passes through the centre of the District, with a length of 26 miles, and six stations within its limits. Nearly the whole trade converges on Damoh station, with the exception of a little from the western corner, which goes to Pathariā station, and of some exports of timber from Ghaterā and Sāgoni. The principal trade routes north of the railway are from Damoh to Hattā and on to Gaisābād, and from Damoh to Narsinghgarh and Batiāgarh. A considerable quantity of produce from the adjoining Bundelkhand States comes through Gaisābād to Hattā and Damoh, and from Pannā through Narsinghgarh. South of the railway, trade converges to Damoh from Jujhār, along the road to Jubbulpore through Nohtā and Jaberā, from Tendūkhedā and Tejgarh on to the road at Abhāna, and from Tārādehī in the extreme south through Rāmgarh and Bhūri. The two northern routes are the most important ones. The chief metalled roads are those from Damoh to Hattā for 23 miles, and from Damoh to the Jubbulpore border for 37 miles. The old military road to Saugor is now only gravelled. The total length of metalled roads is 79 miles and of unmetalled roads 96 miles, and the maintenance charges amounted in 1903-4 to Rs. 29,000. The Public Works department maintains 99 miles of road, and the District council the remainder. The length of avenues of trees is 58 miles. Carriage

in the north of the District is principally by carts, and in the south by bullocks, buffaloes, and ponies.

Famine.

Damoh suffered from moderate or severe failures of crops in 1854–6 and 1868–9. In 1894, on the loss of the spring crop from rust, some relief was granted from April to November, and this continued to a small extent in 1895. From 1892 to 1897 the District only once enjoyed a harvest equal to half an average, and this succession of disasters left it in poor case to bear the famine of 1896–7, when only a quarter of a normal crop was obtained. The numbers relieved in that year reached 60,000, or 18 per cent. of the population, at the end of May, and the total expenditure was 10 lakhs. In 1899–1900 the District escaped somewhat lightly as compared with others, obtaining 43 per cent. of a normal crop. Some relief had already been given on a small scale from April to October, 1899, on account of the poor harvest of the previous year. Very little more was necessary before April, 1900, and the operations closed in October. In August 43,000 persons, or 13 per cent. of the population, were in receipt of assistance, and the total expenditure was $3\frac{1}{2}$ lakhs.

Administration.

The Deputy-Commissioner has one Assistant. For administrative purposes the District is divided into two *tahsīls*, for each of which there are a *tahsīldār* and a *naib-tahsīldār*. The District usually has a Forest officer of the Provincial service, and public works are in charge of the Executive Engineer stationed at Saugor.

The civil judicial staff consists of one District and one Subordinate Judge and two Munsifs. The Divisional and Sessions Judge of Jubbulpore has jurisdiction in Damoh.

Under the Marāthā revenue system villages were farmed out to the highest bidder, and any rights or consideration which the village headmen may have enjoyed in the past were almost entirely effaced. The cultivators were protected only by custom, which enjoined that so long as the annual rent demand was paid, their tenure should be hereditary and continuous. The early revenue history of the District under British administration consists mainly of a succession of abortive attempts to realize an amount equal to or exceeding that exacted during the last and worst period of Marāthā rule. The earliest settlements were made with the village headmen for triennial periods. The first entailed a demand of $3\frac{1}{2}$ lakhs, which could not be paid, and successive reductions became necessary until 1835, when a twenty years' settlement was made for 3·05 lakhs. The assessments proved, however, far too high for a District broken down by a long period of excessive taxation. It is recorded that landed property entirely lost its value, the landholders throwing up their leases and leaving large numbers of villages to be managed direct or farmed to money-lenders.

The making of a fresh settlement was delayed for nine years by the Mutiny, and a thirty years' settlement was concluded in 1863-4. The revised demand was fixed at 2·78 lakhs, the District having by then recovered to a certain extent, owing to the marked rise in agricultural prices which occurred at this period. On this occasion the village headmen received proprietary and transferable rights in their villages. During the thirty years' settlement all circumstances combined to increase the prosperity of the agricultural classes. Concurrently with an extremely light revenue demand, there was a rise in prices amounting to 50 per cent. and an increase in the area under crop of 27 per cent. At the expiration of this period a new settlement was effected for a period of twelve years from 1893-4, a shorter term than the usual period of twenty years having been fixed in order to bring Districts under settlement in regular rotation. Under it the revenue demand was increased to 4·43 lakhs, or by 58 per cent., giving an incidence of 11 annas 7 pies per cultivated acre, and varying from Rs. 1-0-8 in Batiāgarh to R. 0-3-9 in Kumhāri. The rental incidence for the District was Rs. 1-1-10, the maximum and minimum rates being Rs. 1-11-8 and R. 0-5-10 in the same circles. The new demand would have been easily payable, but for the succession of failures of crops which have characterized the history of Damoh since its introduction. The demand has in consequence been proportionately reduced in those villages which suffered most severely, and in 1903-4 stood at 3·54 lakhs.

The following are the collections on account of land and total revenue, in thousands of rupees:—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	2,66	2,69	3,60	3,55
Total revenue . .	3,92	4,44	4,88	5,24

The management of local affairs outside the municipal town of DAMOH is entrusted to a District council and two local boards, each having jurisdiction over one *tahsīl*. The income of the District council in 1903-4 was Rs. 47,000. The expenditure was mainly on public works (Rs. 14,000) and education (Rs. 15,000).

The police force consists of 322 officers and men, under a District Superintendent. There are also 728 village watchmen for 1,116 inhabited villages. Damoh town contains a District jail, with accommodation for 134 prisoners, including 14 females. The average daily number of prisoners during 1904 was 59.

The District stands eighth of those in the Central Provinces as regards the literacy of its population, 7·5 per cent. of males being able to read and write; only 373 women were returned as literate in 1901.

Statistics of the number of pupils under instruction are as follows: (1880–1) 2,420; (1890–1) 3,260; (1900–1) 3,163; and (1903–4) 4,384, including 234 girls. The educational institutions comprise 2 English middle schools, 68 primary schools, and 2 private schools in receipt of fixed grants. The expenditure on education in 1903–4 was Rs. 23,000, of which Rs. 11,500 and Rs. 7,600 was provided from Provincial and Local funds respectively, and Rs. 1,500 from fees.

The District has 8 dispensaries, with accommodation for 62 in-patients. During 1904 the total number of cases treated was 59,845, of whom 400 were in-patients, and 1,311 operations were performed. The expenditure was Rs. 6,200, of which the greater part was provided from Provincial and Local funds.

Vaccination is compulsory only in the municipal town of Damoh. The proportion of successful vaccinations in 1903–4 was 36 per 1,000 of the population of the District.

[J. B. Fuller, *Settlement Report* (1893). A District Gazetteer is under preparation.]

Damoh Tahsīl.—Southern *tahsīl* of Damoh District, Central Provinces, lying between 23° 10′ and 24° 4′ N. and 79° 3′ and 79° 57′ E., with an area of 1,797 square miles. The population decreased from 195,937 in 1891 to 183,316 in 1901. The density in the latter year was 102 persons per square mile. The *tahsīl* has one town, DAMOH (population, 13,355), its head-quarters; and 692 villages. Excluding 543 square miles of Government forest, 53 per cent. of the available area is occupied for cultivation. The cultivated area in 1903–4 was 527 square miles. The demand for land revenue in the same year was Rs. 2,16,000, and for cesses Rs. 22,000. The north-western portion of the *tahsīl* includes part of the open plain bordering the Sonār river, but the greater part of it consists of an alternation of low hills and narrow landlocked valleys.

Damoh Town.—Head-quarters of the District and *tahsīl* of the same name in the Central Provinces, situated in 23° 50′ N. and 79° 27′ E., on the Bīna-Katnī section of the Indian Midland Railway, 702 miles from Bombay. The name is supposed to be derived from Damayantī, the wife of Rājā Nala of Narwar. Population (1901) 13,355. Damoh is the fifteenth town in the Province in size, and is increasing in importance. It was constituted a municipality in 1867, and the municipal receipts during the decade ending 1901 averaged Rs. 14,000. In 1903–4 the receipts were Rs. 22,000, derived from a variety of sources, including house tax, market dues, and cattle registration fees. Damoh is the collecting and distributing centre for local trade, and possesses the only weekly cattle market held in the District. An extensive cattle-slaughtering industry has lately grown up, and many handicrafts, such as the manufacture of vessels from

bell-metal, pottery, weaving, and dyeing, are carried on. A number of betel-vine gardens are situated in the environs, and water-nuts are grown in the tanks for export. Damoh is situated below some stony hills, which radiate heat in the hot season and increase the temperature. A difficulty is experienced in obtaining good water, as the soil is very porous and there are but few wells. The town contains an English middle school, an Urdū school, some branch schools, and four dispensaries. A station of the American mission known as the Disciples of Christ is worked by European missionaries; among the institutions supported by the mission are a women's hospital and dispensary, an orphanage, a dairy farm, an industrial school and other schools.

Damrā.—Village in Goālpāra District, Eastern Bengal and Assam, situated in 25° 56′ N. and 90° 47′ E., near the foot of the Gāro Hills. For many years this place has been a mart where the Gāros exchange their cotton and lac for the products of the plains. In 1863 a native Christian colony was started in the neighbourhood, which has attained a considerable measure of success. The settlement consists of about 150 houses, out of which at least 100 families are Christians. These Gāro converts have built school-houses and a chapel; they support their own pastor, and contribute towards the maintenance of the schools, and of six evangelists who are working among the unconverted hillmen.

Dāngs, The.—A tract of country in the Surat Political Agency, Bombay; bounded on the north by Baroda State, on the south by Nāsik District and the Surgāna State, on the east by Khāndesh and Nāsik Districts and the Baroda State, and on the west by the Bānsda State in Surat Agency, the Baroda State, and Nāsik District. The Dāngs consist of fourteen petty estates, ruled by Bhīl chieftains, and extend from 20° 22′ to 21° 5′ N. and from 73° 28′ to 73° 52′ E., with an estimated area of about 999 square miles. The extreme length from north to south is 52 miles, and the breadth 28 miles.

As a whole, the country presents the aspect of a large and almost unbroken forest. It is extremely hilly, walled in almost entirely by hills on all sides, and broken up by deep ravines, through which the Ambika, Purna, Kapri, and Girra rivers and their tributaries flow down towards Surat District. The highest elevation is 4,358 feet. Towards the centre and west the densest forests and to the east the largest clearings are found. The rock consists of various forms of trap; and though the mineral resources have not been closely examined, it is unlikely that they are very valuable. In the valleys and depressions good black soil is often found, while on the slopes and uplands it is generally reddish in colour, or, if dark, full of boulders. Timber (teak and various other useful species), bamboos, and minor forest

produce are by far the most important products. *Nāgli* and inferior rice are the chief crops, but superior food-grains are being introduced. The people depend to a considerable extent on game, fish, roots, and berries, &c. They are well provided with cows and bullocks, but buffaloes and goats are rare, and sheep are never seen. The rainfall is heavy, probably 100 inches or more, but reliable data regarding both rainfall and temperature are not available. Throughout the rains and cold season (June 15 to February 15) the country is very unhealthy, few natives from outside being able to keep well for long during this period. From the middle of February to the middle of June the Dāngs are healthy, and, except in some of the valleys, not unpleasantly hot. Malarial fever, dysentery, and colds are the commonest complaints. About one-fourth of the population are Bhīls, and the rest Koknis and Vārlis. Not one of them can read or write. They are polite, lazy, and addicted to the use of *mahuā* spirits. Their occupations are cultivation, hunting, and fishing; but they have recently taken readily to labour, and now work willingly on roads, buildings, and to some extent on timber operations. Formerly they changed their villages very frequently. Now they are gradually being induced to settle down. Under the former native governments the Bhīls were the terror of the neighbouring districts, and on occasions the most indiscriminate vengeance was wreaked on them for their habitual depredations. On the occupation of Khāndesh by the British in 1818, anarchy was at its height—the roads were impassable, villages were plundered, and murders committed daily, the only protection the inhabitants of the plains could obtain being through regular payment of blackmail. An expedition was sent into the Dāng country, but at the end of three months less than half the force marched back into Mālegaon, the others having succumbed to the malaria of the jungle. At that time Captain (afterwards Sir James) Outram came among the Bhīls. First conciliating them with feasts and his prowess in tiger-shooting, he eventually succeeding in forming a Bhīl corps, originally based on nine men who had accompanied him on shooting expeditions. In 1827 this Bhīl corps numbered 600 rank and file, who fought boldly for the Government and suppressed plundering. Crime is now rare. The few offences that occur are mainly cases of illicit distillation, and the roads are as safe as in settled British Districts. The only police force maintained in the Dāngs consists of seven constables stationed at Ahwa.

There are fourteen petty estates in the Dāngs, as shown on the next page. All are held by Bhīl chiefs, of whom four claim the title of Rājā; the others are called Naiks, Pradhāns, or Ponwārs. All are practically independent, though a nominal superiority is awarded to the Gārvi chief, under whose banner the rest were bound to serve

in time of war. In former times the Gārvi chief was, in common with the other Dāng chiefs, tributary to the *deshmukh* of Malhar, a strong fort in the Bāglān *tāluka* of Nāsik District. But the oppression exercised by the *deshmukh* in collecting his tribute gave rise to such frequent disturbances that the British Government was induced to deduct the amount from the sums now paid to the Dāng chiefs for the leases of their forests, and hand it over direct to the representative of the *deshmukh*.

Name of Estate.	Area in square miles.	Villages.	Population, 1901.	Estimated gross revenue, in rupees.
Gārvi	305	53	4,682	6,500
Amāla	172	46	3,222	3,200
Derbhavti	172	44	3,199	4,300
Vāsurna	172	42	2,373	3,200
Pimpri	100	25	2,284	4,100
Kirli	12	9	386	700
Shivbāra	12	6	141	600
Chinchli-Gadad	16	25	1,291	800
Avachar	6	6	268	300
Pimplādevi	4	2	132	250
Vadhyaman	9	2	129	250
Palāsvihir	8	3	142	350
Bilbāri	2	3	217	200
Zāri Gārkhadi	9	3	168	250
Total	999	269	18,634	25,000

The administration of justice, civil and criminal, in the Dāngs is vested in the Collector of Surat as *ex-officio* Political Agent, capital sentences being referred for the confirmation of Government. The divisional forest officer, as Assistant Political Agent, and the *Dīwān* exercise first and second-class magisterial powers respectively. Petty cases are settled by the Rājās and Naiks themselves, each in his own jurisdiction, the punishments inflicted being chiefly fines in money and cattle. None of the chiefs possesses a *sanad* authorizing adoption, and the succession in all cases follows the rule of primogeniture. The whole area of the Dāngs is leased to Government for an indefinite term, but the lease may be relinquished at any time on giving six months' notice. Since the control of the Dāngs was given to Surat, many improvements have been effected. They are now being gradually opened out and settled by Government. Cart-roads are being constructed, and serviceable buildings and wells for the use of the forest and other subordinate officials have been erected in all directions. The principal places are connected by roads more or less suitable for cart traffic. Ahwa, a plateau about 1,600 feet above the sea, near the centre of the Dāngs, has been selected as the head-quarters of the *Dīwān*, Hospital Assistant, police, excise officials, and of a Range

Forest officer and several forest subordinates. Mesketri and Waghai, two important outlets, are the head-quarters of the North and South Dāng Rangers respectively. There are post offices at Ahwa and Waghai. A dispensary and a small school have been opened at Ahwa, where a liquor distillery has also been established to supply the eleven liquor shops situated in different parts of the Dāngs.

Dankaur.—Town in the Sikandarābād *tahsīl* of Bulandshahr District, United Provinces, situated in 28° 21′ N. and 77° 33′ E., 20 miles west of Bulandshahr town. Population (1901), 5,444. It is said to have been founded by Drona, the hero of the Mahābhārata, who taught the Pāndavas the use of arms. A masonry tank and ancient temple are still known as Dronācharj. The town lies on the edge of the high bank above the Jumna, and the upper portion is gradually being deserted for the lower, on the ground that it is unlucky. Dankaur is administered under Act XX of 1856, with an income of about Rs. 1,300. It has a thriving trade in *ghī*, sugar, and grain. A primary school is attended by 80 pupils.

Dankhar.—Ancient capital of the Spiti canton, in the Kulū subdivision of Kāngra District, Punjab, situated in 32° 5′ N. and 78° 15′ E., and still the head-quarters of the *nono* or hereditary governor of Spiti. Population (1901), 713. It is picturesquely placed on a spur 12,700 feet above sea-level, which juts out into the main valley, and ends in a precipitous cliff overtopped by a rude fort, now the property of Government, and flanked by a monastery of Buddhist monks of the Gelukpa order. The inhabitants are pure Tibetans.

Dānta.—Petty State in Mahī Kāntha, Bombay.

Danubyu Township.—Northernmost township of Ma-ubin District, Lower Burma, lying between 17° 0′ and 17° 25′ N. and 95° 24′ and 95° 45′ E., with an area of 305 square miles. The Irrawaddy passes down its entire length, forming the greater part of its eastern border. Danubyu Town (population, 6,137), the head-quarters, stands on the western or right bank of the river. The whole township is level. Its low areas are protected by embankments and are very fertile, and the density of population is higher than that of any other township in the District. In 1901 the township contained 127 villages and a population of 85,033, having risen from 60,920 in 1891. In 1903–4 the cultivated area was 178 square miles, paying Rs. 2,79,000 land revenue.

Danubyu Town.—Head-quarters of the township of the same name in Ma-ubin District, Lower Burma, situated in 17° 15′ N. and 95° 38′ E., on the west bank of the Irrawaddy. Population (1901), 6,137. The affairs of Danubyu are managed by a town committee, consisting of eight members. The revenue of the town fund in 1903–4 was Rs. 24,000, and the expenditure Rs. 27,000. Under Burmese rule,

Danubyu was a post of some strategic importance, and in the first Burmese War a stubborn resistance was offered by its garrison to the British advance up the Irrawaddy. Here in 1825 the career of Mahā Bandula, the Burmese generalissimo, was terminated by a shell from the British guns. During the second Burmese War, Danubyu was occupied by the Burmans, but was evacuated on the approach of the invading force. The remains of the old Burmese fort are still to be seen. The town possesses a dispensary and a good Anglo-vernacular school, and enjoys some local fame for the manufacture of *thinbyu* mats and cheroots.

Danus.—A hybrid Shan-Burmese community inhabiting the borderland between the Shan States and Upper Burma, for the most part between the 21st and 23rd parallels of N. latitude. In 1901 the Danus numbered 63,549, the majority having been enumerated in Mandalay District and the Northern and Southern Shan States. They are often divided, according to the language which they speak, into Burmese Danus and Shan Danus. In dress the Danus resemble the communities, Shan or Burmese, among whom they live, and they are, like their neighbours, Buddhists. The origin of the name Danu is doubtful; the people are probably a comparatively modern product and have never had any separate political identity. The Danus must not be confounded with the Danaws, an almost extinct tribe, whose habitat lies for the most part in the Myelat division of the Southern Shan States, and whose language points to their being of Mon-Anam stock.

Daosa.—Head-quarters of the *nizāmat* and *tahsīl* of the same name in the State of Jaipur, Rājputāna, situated in 26° 54′ N. and 76° 21′ E., a little to the south of the Agra-Ajmer road and of the Daosa station on the Rājputāna-Mālwā Railway, 38 miles east of Jaipur city. Population (1901), 7,540. Daosa was the capital of the Kachwāhas before they wrested Amber from the Mīnās. To the east overlooking the town is an isolated hill, 1,643 feet above the sea; and on its summit is a fort said to have been built by the Bargūjar Rājās, who held this part of the country before the advent of the Kachwāhas. The town itself is surrounded by a half-ruined wall. It contains a post office, 7 schools attended by 270 pupils, and a hospital with accommodation for 4 in-patients. At Bhānkri, 4 miles to the north-east, large slabs of a foliated mica schist are quarried, which are largely used for roofing, while from Raiāla, 19 miles to the north-west, a greyish-white marble is brought for the manufacture of idols.

Daphābum.—A mountain ridge, situated between 27° 28′ and 27° 47′ N. and 96° 14′ and 96° 55′ E., to the east of Lakhimpur District, Eastern Bengal and Assam. The summit of the highest peak is 15,008 feet above sea-level.

Daphlā.—Hills on the Darrang-Lakhimpur frontier, Eastern Bengal and Assam. *See* DAFLĀ HILLS.

Daphlāpur.—Petty State in the Political Agency of Bijāpur, Bombay. *See* BIJĀPUR AGENCY.

Dāpoli Tāluka.—North-western *tāluka* of Ratnāgiri District, Bombay, lying between 17° 35′ and 18° 4′ N. and 73° 2′ and 73° 22′ E., with an area of 500 square miles, including the petty subdivision (*petha*) of Mandangarh. There are two towns, DĀPOLI (population, 2,867), the head-quarters, and HARNAI (6,245); and 243 villages. The population in 1901 was 154,628, compared with 154,991 in 1891. The density, 309 persons per square mile, is a little above the District average. The demand for land revenue in 1903–4 was 1·34 lakhs, and for cesses Rs. 9,000. The seaboard of Dāpoli, stretching for 30 miles, has the characteristics of other parts of the Konkan coast. Bluff headlands stand at the mouths of the chief rivers, and the coast-line is indented with small and sandy bays. The coast villages, dotted over the low belts of sand lying between the sea and the cliffs, are thickly peopled, and are concealed in dense groves of palms. Along the coast lies Harnai, a good harbourage from northerly winds, and opposite Harnai is the island fortress of Suvarndrug. Inland, the aspect of the *tāluka* is bleak and rugged. Boulders of laterite crop out over the bare plateaux of this region, and lie scattered in the innumerable watercourses of long dried-up streams. Eastward the prospect improves. The villages are shaded by clumps of jack and mango-trees; teak grows in some of the more sheltered ravines; and the river banks are covered with brushwood. The climate on the whole is temperate and healthy. The sea-breeze is felt in all parts. A small portion of alluvial soil is found on the banks of the rivers and on the flats formed by deposits at their estuaries. A good deal of salt marsh and tidal swamp has been turned into fertile gardens and productive rice-fields. The annual rainfall is heavy, averaging 131 inches at Dāpoli and 166 inches at Mandangarh. The latter is the highest figure for the whole District.

Dāpoli Town.—Head-quarters of the *tāluka* of the same name in Ratnāgiri District, Bombay, situated in 17° 46′ N. and 73° 11′ E., about 5 miles from the sea. Population (1901), 2,867. The municipality, established in 1880, has now been abolished, its place being taken by a special committee. In 1903–4 the income was Rs. 3,700. In 1818 Dāpoli was constituted the military station of the Southern Konkan. In 1840 the regular troops were withdrawn, but a veteran battalion was retained till 1857. After that date the cantonment was broken up and the town declined in importance. A picturesque old English church stands within the site of the old camp, and there are two European graveyards dating from 1818 and 1821. The town contains a Sub-

ordinate Judge's court, a dispensary, an S.P.G. Mission school, and a technical school.

Dārāpur.—*Tāluk* and town in Coimbatore District, Madras. *See* DHĀRĀPURAM.

Darbhangā District.—District in the Patna Division of Bengal, lying between 25° 28′ and 26° 40′ N. and 85° 31′ and 86° 44′ E., with an area of 3,348[1] square miles. It is bounded on the north by Nepāl, on the east by Bhāgalpur District, on the south by the Ganges and the District of Monghyr, and on the west by Muzaffarpur.

Physical aspects.

The District is one large alluvial plain with a general slope from north to south, varied by a depression in the centre. It contains no hills, but is divided by its river system into three well-defined physical divisions. The first of these, starting from the south, is the tract beyond the Burhī Gandak river in the extreme south-west of the District, comprising the *thānas* of Dalsingh Sarai and Samāstipur; it is a large block of upland, with a few *chaurs* or marshes here and there. The second division, corresponding roughly with the Wārisnagar *thāna*, consists of a small *doāb* between the Bāghmati and Burhī Gandak rivers; it is the lowest part of the District and is liable to inundation from the former river. The rest of the District, comprising the head-quarters and Madhubanī subdivisions, is a low-lying plain intersected by numerous streams and marshes, but traversed also in parts by ridges of uplands. The south-eastern portion, corresponding roughly with the *thānas* of Baherā and Ruserā, is during the rains mainly a chain of temporary lakes, joined together by the numerous beds of the hill streams which pass through the Madhubanī subdivision on their way from Nepāl to the Ganges. Large portions of this area do not dry up till well on in the cold season, and in some places communications are open for only three or four months of the year. In the Madhubanī subdivision the land is generally higher, especially in the three western *thānas* and in the south of Phulparās, which contains stretches of high land.

The District contains three main river systems, the Ganges, the Little Gandak, and the Kamlā-Tiljūgā. The Ganges, however, skirts it for only 20 miles; and the only stream of any importance which joins it direct and not by way of the other river systems is the Bayā, an overflow of the Great Gandak, which flows for a short distance across the extreme south-east corner of the District. The Burhī or Little Gandak is an important river throughout its course in Champāran, Muzaffarpur, Darbhangā, and North Monghyr. In all these Districts it marks a clearly defined division of the country. It enters Darbhangā District near Pūsa and, after flowing past Samāstipur, leaves it just below

[1] The area shown in the *Census Report* of 1901 was 3,335 square miles. The area quoted in the text is that determined in the recent survey and settlement operations.

Caption: Ruserā. Though its importance has been diminished by the railway, it is still a valuable trade highway, and there are many large bazars and marts on its banks. It is navigable practically all the year round for country boats of fair size. Its offshoots, the Jamwāri and Balān, leave it near Pūsa, and after flowing through the south-west of the Samāstipur subdivision, rejoin the parent stream in Monghyr, before it flows into the Ganges at Khagariā. All the rivers in the head-quarters and Madhubanī subdivisions belong to the Kamlā-Tiljūgā group, so called because they converge at Tilakeswar in the south-east corner of the Ruserā *thāna*, and are thenceforward known indiscriminately by either name while proceeding through Monghyr and Bhāgalpur to join the Ganges and the Kosī by various tortuous courses. The first of the group, the Bāghmati, rises in Nepāl, and during its course through Darbhangā pursues an easterly direction parallel to the Burhī Gandak; it formerly joined this river near Ruserā, but has within the past thirty years cut a new bed for itself, and now cuts into the Karai and joins the Tiljūgā at Tilakeswar. The Karai prior to its junction with the Bāghmati is an unimportant stream. The Little Bāghmati, on which the town of Darbhangā stands, also finds its way to the Tiljūgā by the bed of the Karai. Its chief tributary is the Dhaus, which runs through the north-west of Benīpatī *thāna*. The Little Bāghmati was formerly joined near Kamtaul by the Kamlā, a river whose old beds are found all over the north of the Madhubanī subdivision. It used to flow 10 miles east of Madhubanī town, but now passes 10 miles to the west of it, its main channel running about 4 miles east of Darbhangā town past Baherā, Singiā, and Hirni to Tilakeswar. It is a fairly large river in the rains and liable to heavy floods. Still farther east is the Little Balān, a deep and narrow river with a well-defined bed, which runs south through the eastern part of the Khajaulī and Madhubanī *thānas*, and joins the Tiljūgā near Ruserā. The Balān proper, also known as the Bhāti Balān, is a river with a wide shifting sandy bed, liable to heavy floods but practically dry during a great part of the year. Its old beds are found all over the north of the Phulparās *thāna*. Last comes the Tiljūgā, which rises in Nepāl and skirts the entire eastern boundary of the District, though portions of it are in Bhāgalpur. The rivers in the Madhubanī and head-quarters subdivisions are liable to overflow their banks during heavy floods; but they rapidly drain off into the low-lying country in the south-east of the District, on which all the lines of drainage north of the Burhī Gandak converge.

The District is covered by the older alluvium. *Kankar* or nodular limestone of an inferior quality occurs in places.

Darbhangā contains no forests; and, except for a few very small patches of jungle, of which the chief constituents are the red cotton-tree (*Bombax malabaricum*), *khair* (*Acacia Catechu*), and *sissū* (*Dalbergia*

Sissoo), with an undergrowth of euphorbiaceous and urticaceous shrubs and tree weeds, and occasional large stretches of grass land interspersed with smaller spots of *ūsar* land, the ground is under close cultivation, and besides the crops carries only a few field-weeds. Near villages small shrubberies may be found containing mango, *sissū*, *Eugenia Jambolana*, various species of *Ficus*, an occasional tamarind, and a few other semi-spontaneous and more or less useful species. Both the palmyra (*Borassus flabellifer*) and the *khajar* or date-palm (*Phoenix sylvestris*) occur planted and at times self-sown. The field and roadside weeds include various grasses and sedges, chiefly species of *Panicum* and *Cyperus*, and in waste corners and on railway embankments thickets of *sissū*, derived from both seeds and root-suckers, very rapidly appear. The sluggish streams and ponds are filled with water-weeds, the sides being often fringed by reedy grasses and bulrushes, sometimes with tamarisk bushes intermixed.

Wild hog are very common; a stray tiger or leopard occasionally wanders down along a river-bank from Nepāl, and a few wolves are also found. Crocodiles infest the rivers, and several kinds of dangerous snakes abound, the most common being the *karait* (*Bungarus coeruleus*) and the *gohuman* or cobra (*Naia tripudians*).

Dry westerly winds are experienced in the hot season, but the temperature is not so excessive as in South Bihār, the highest on record at Darbhangā being 107° in 1894. The mean maximum temperature ranges from 73° in January to 96° in April and May, and falls to 75° in December, decreasing rapidly in November and December. The mean minimum temperature varies from 52° in January to 80° in July; the lowest ever recorded is 38·3° in January, 1878. Rainfall is heavy in the submontane tract, partly owing to the heavy showers which occur when cyclonic storms break up on reaching the hills, and partly because the monsoon current is stronger towards the west along the foot of the hills. The annual rainfall for the District averages 50 inches, of which 7·4 inches fall in June, 12·5 in July, 12·9 in August, and 9·9 in September. Parts of the District, especially the extreme south and the *doāb* between the Bāghmati and the Little Gandak, are liable to inundations, but these usually result in little damage. Heavy floods, however, occurred in 1898, 1902, and 1906, causing some loss of life and cattle, carrying away houses, and damaging the roads. The floods of 1906 were particularly severe, causing great distress and, in some tracts, scarcity, and necessitating famine relief measures.

History.

In ancient times the District formed part of the old kingdom of Mithilā. It passed successively under the Pāl and Sen dynasties, and was conquered by Muhammad-i-Bakhtyār Khiljī in 1203. From the middle of the fourteenth century it was under a line of Brāhman kings until it was merged in the Mughal

empire in 1556. Considering the present position of Darbhangā District as the head-quarters of Mithilā Brāhmanism, singularly little is known of its early history prior to the Muhammadan period. The Rāmāyana contains a few references to localities which local patriotism identifies with some existing villages in the Benīpatī *thāna*, chief among them being Ahiāri, which is said to have been the abode of Ahalyā, the wife of Gautama Rishi, who was turned into stone by her husband's jealous harshness and restored to life by Rāma. But no reference is found to any place in the District in the more authentic records of Buddhism; and it seems to have been left unvisited by the Buddhist pilgrims, who traversed a large part of Bihar in the fifth and seventh centuries of the Christian era. Nor is it possible to draw from the history of the Pāl and Sen dynasties even such scanty information as is obtainable in regard to Muzaffarpur and Sāran. There can be little doubt that up to the twelfth or thirteenth century Darbhangā was relatively a backward tract, and that its development has coincided with the rise of Brāhmanism. The oldest known document relating to the District is a grant dated A. D. 1400, conveying the village of Bisfi in the Benīpatī *thāna* to the poet Vidyāpati, who flourished in the reign of Rājā Siva Singh and made the latter the best known of all the Hindu Rājās of Mithilā. Probably the oldest family in the District is that of the Rājā of Dharaur, which flourished long before the English occupation, but is now in very reduced circumstances. At the present day, the only landholder of any historic importance is the Mahārājā of Darbhangā (*see* DARBHANGĀ RĀJ). When Darbhangā passed into the hands of the British in 1765 it was included in *Sūbah* Bihār and formed with the greater part of Muzaffarpur District the *sarkār* of Tirhut. Bihār was retained as an independent revenue division, and in 1782 Tirhut (including Hājīpur) was made into a Collectorate. In 1875 Tirhut was divided into the two existing Districts of Muzaffarpur and Darbhangā. The ruins of old forts are found at JAYNAGAR, Berautpur, Bhawāra, Balarājpur, and Mangal.

Population.

The population of the present area increased from 2,136,898 in 1872 to 2,630,496 in 1881, to 2,801,955 in 1891, and to 2,912,611 in 1901. The increase in 1881 was largely due to defective enumeration in 1872. During the last of the decennial periods, the progress of the District was impeded by scarcity in 1891 and by famine in 1896–7; the period moreover was not a healthy one, and the recorded deaths outnumbered the births in three out of the ten years. Fever causes the highest mortality, while cholera occasionally appears in an epidemic form. Plague appeared in the District at the end of 1900. Deaf-mutism is prevalent along the course of the Burhī Gandak and Bāghmati rivers. The principal statistics of the Census of 1901 are given in the following table:—

Subdivision.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Darbhangā	1,224	2	1,306	1,065,595	871	+ 1·6	35,628
Madhubanī	1,346	1	1,084	1,094,379	813	+ 7·8	26,830
Samāstipur	778	1	843	752,637	967	+ 1·9	40,170
District total	3,348	4	3,233	2,912,611	870	+ 3·9	102,628

The four towns are DARBHANGĀ, the head-quarters, MADHUBANĪ, RUSERĀ, and SAMĀSTIPUR.

Darbhangā supports a larger population to the square mile than any District in Bengal except Muzaffarpur, Sāran, and the Twenty-four Parganas (excluding the Sundarbans). The density is greatest in the Samāstipur subdivision, where the rich uplands produce valuable crops. There is still some room for expansion in Madhubanī, but in the other subdivisions the pressure of the agricultural population on the soil is already so great that further expansion under present conditions is not to be expected or desired. A considerable number of males of the class of landless labourers seek a livelihood in other parts; they go by preference to the neighbourhood of Calcutta or to Dacca and North Bengal. The vernacular of the District is the Maithilī dialect of Bihārī; Musalmāns speak a form of Maithilī with an admixture of Persian and Arabic words, known as Jolāhā *boli*. In 1901 Hindus numbered 2,559,128, or 87·9 per cent. of the total population, and Musalmāns 352,691, or 12·1 per cent.

Among the Hindus the most numerous castes are Ahīrs or Goālās (384,000), Dosādhs (208,000), Brāhmans (198,000), Bābhans (154,000), Dhānuks (152,000), Koiris (145,000), Mallāhs (117,000), and Chamārs (106,000); while Kewats, Khatwes, Kurmīs, Musahars, Rājputs, Tāntis, and Telis each number between 50,000 and 100,000. Two small castes, Deohars (inoculators) and Dhīmars (grain-parchers, *pālki*-bearers, &c.), are peculiar to the District. Among Musalmāns, Shaikhs (153,000), Jolāhās (58,000), Dhuniās (40,000) and Kunjrās (39,000) are the best represented. Agriculture supports 78·6 per cent. of the population, industries 10·2 per cent., commerce 0·4 per cent., and the professions 1·1 per cent.

There are several small Christian communities of different denominations, but no missions of any importance; and of 710 Christians in the District in 1901 only 296 were natives. There is a small Roman Catholic mission at Samāstipur, a Methodist mission, and a Zanāna Bible and Medical mission.

The elevated land south-west of the Burhī Gandak is the richest and

most fertile part of the District, producing all the most valuable *rabi* and *bhadoi* crops. In the low-lying *doāb* between the Bāghmati and the Little Gandak the main crop grown is winter rice, though in many parts good *rabi* crops are also raised on the lands enriched by inundation. In the Baherā and Ruserā *thānas*, in the south-east of the plain which constitutes the rest of the District, the only crop of any importance is winter rice, which when not submerged by floods at too early a date is very prolific. The higher land in the Madhubanī subdivision is suitable for the more valuable *rabi* crops; but the staple crop is winter rice, and the produce of Alāpur, Jabdi, and Bachaur is famous all over Bihār. The only classification of land understood by the ordinary cultivator is that into *dhanhar* and *bhith*, the former being the lowlands on which rice is grown, and the latter the uplands growing cereals or crops of any kind other than rice.

Agriculture.

The chief agricultural statistics for 1903-4 are shown below, areas being in square miles:—

Subdivision.	Total.	Cultivated.	Cultivable waste.
Darbhangā	1,224	923	132
Madhubanī	1,346	1,000	169
Samāstipur	778	587	59
Total	3,348	2,510	360

It is estimated that 44 per cent. of the net cultivated area is twice cropped.

The most important feature of the agriculture of the District is its dependence on the *aghani* (or winter) harvest, no less than 58 per cent. of the cultivated area being under crops of this kind, chiefly winter rice, which in 1903-4 covered 1,465 square miles. *Maruā* (*Eleusine coracana*) is grown over an area of 331 square miles; wheat covers 106 square miles, barley 163, maize 152, gram 83, and miscellaneous food-grains 59 square miles; these last consist chiefly of *khesāri*, *rahar*, *masurī*, *kodon*, *chīna*, *sāwān*, *urd*, *mūng*, *janerā*, and oats. Miscellaneous food-crops, consisting mainly of potatoes, yams, and *suthnī* (*Dioscorea fasciculata*), are extensively grown in the Samāstipur subdivision. The chief non-food crops are oilseeds (principally linseed), covering 349 square miles; they are very largely grown as catch-crops in winter rice lands, but their value is comparatively small. Tobacco is cultivated on 48 square miles, chiefly in the Samāstipur subdivision. Indigo, with 53 square miles, covers a larger area than in any other Bengal District except Champāran and Muzaffarpur, but the area is steadily decreasing. Sugar-cane and poppy are grown, but to a com

paratively small extent. Of the other non-food crops, ***kharhaul*** or thatching-grass is the most valuable.

The area under cultivation has nearly doubled within the last 100 years, but the greater part of the extension took place in the first half of the nineteenth century and little further expansion is now practicable. Experiments with improved seeds have been made in the Narhan Ward's Estate, but without much success. Several Europeans are now cultivating sugar-cane, and experiments in the growth of rhea and the preparation of rhea fibre are being made at Dalsingh Sarai. The Government estate at PŪSA has recently been made over to the Government of India as the site for an Imperial agricultural college and research institute, and portions of the estate are being utilized as a farm for experimental cultivation and cattle-breeding. Government advanced Rs. 33,000 as loans after the scarcity of 1891–2, and Rs. 20,000 in the famine of 1897.

The local cattle are weak and small. This is due partly to careless breeding and partly to the want of adequate pasturage.

There are no Government irrigation works; but an area of 171 square miles, or 6½ per cent. of the cultivated area, is irrigated from other sources, chiefly in the Madhubanī subdivision, where the numerous rivers and streams are very largely taken advantage of to bring water to the winter rice. In the Benīpatī *thāna* in this subdivision a very complete system of *āhars* and *pains* has been constructed, and a large area is also irrigated from tanks. In the Samāstipur subdivision extensive irrigation is not practicable, nor is it required for the crops mainly grown, but the valuable poppy and tobacco crops are watered from wells.

Beds of *kankar* or nodular limestone of an inferior quality are met with in several places. Saliferous earth is found in patches all over the District, and a special caste, the Nuniās, earn a scanty livelihood by extracting saltpetre. The amount produced in 1903–4 was 51,000 maunds.

Coarse cloth, pottery, and mats are manufactured, and brass utensils made at Jhanjhārpur have a local reputation. The manufacture of indigo in the District by European agency dates back to the time of the Permanent Settlement, the present concerns of Dalsingh Sarai, Jitwārpur, Tiwāra, and Kamtaul having been all founded before the year 1800. During the nineteenth century the cultivation of indigo spread into every *thāna* of the District, but it was always more prevalent in the south than in the north, where the prevailing soil is less suitable for it. In 1874 the District contained the largest concern in India and probably in the world: this was Pandaul, which with its outworks comprised an area of 300 square miles. It was subsequently split up,

Trade and communications.

the northern outworks being purchased by the present Mahārājā of Darbhangā. He abandoned the cultivation of indigo about three years ago; and the fall in the price of the dye, due to the competition of artificial substitutes, has caused many other factories to abandon or contract very greatly the area under indigo. The Settlement officer in 1903 enumerated 28 factories with 36 outworks in the District. In 1903-4 the area under indigo had fallen to 34,000 acres, of which the greater part lay within the Samāstipur subdivision; and in 1904 the number of factories had decreased to 24 with 27 outworks. The chief feature of the industry in this District, as compared with the other indigo-growing tracts in North Bihār, is the large area cultivated direct by the factories themselves, amounting in the Samāstipur subdivision to no less than 94 per cent. of the total area under indigo. The plant, when cut, is fermented in masonry vats and oxidized either by beating or by currents of steam. The dye thus precipitated is boiled and dried into cakes. In 1903-4 the out-turn of indigo was 7,015 maunds, valued at 9·12 lakhs. Of late years, owing to the fall in the value of indigo, the factories have taken to the growing of ordinary crops, and this tendency is particularly marked in the Dalsingh Sarai *thāna*, where the results have been highly successful. The sugar industry is important in the Madhubanī subdivision, where the out-turn of 30 factories in 1904 was valued at 2·71 lakhs.

The principal exports are rice, indigo, gram, pulses, linseed, mustard seed, saltpetre, tobacco, hides, *ghī*, and timber; and the principal imports are rice and other food-grains, salt, kerosene oil, gunny-bags, coal and coke, European cotton piece-goods, and raw cotton. Gram, pulses, and oilseeds are chiefly sent to Calcutta, and rice and other food-grains to Sāran and Muzaffarpur. The imports of food-grains come for the most part from Bhāgalpur and Nepāl, coal and coke from Burdwān, kerosene oil from the Twenty-four Parganas, and salt and piece-goods from Calcutta. The principal marts are DARBHANGĀ TOWN, SAMĀSTIPUR, MADHUBANĪ, RUSERĀ, Pūsa, Kamtaul, Dalsingh Sarai, NARAHIĀ (for the Nepālese grain traffic), and JHANJHĀRPUR. The chief trading castes are Agarwāls, Barnawārs, Kasarwānis, Kathbaniās, Khattrīs, and Sinduriās. Most of the trade with Calcutta and the neighbouring Districts is carried by rail. The traffic with Nepāl is carried in carts and on pack bullocks, and occasionally by coolies. Some timber is floated down the rivers.

The famine of 1874 gave a great impetus to the construction of railways, and the District is on the whole well off in the matter of communications. Its south-west corner is traversed for 29 miles by the main line of the Bengal and North-Western Railway, and also by 25 miles of the new chord-line from Hājīpur to Bachwāra, which runs parallel to the Ganges embankment from east to west. From Samāsti-

pur a line runs to Darbhangā town and there branches off in two directions, the first north-west to Sītāmarhi through Kamtaul and Jogiāra, and the other due east to Khanwā Ghāt on the Kosi. The total length of the line within the District is 146 miles. Most of the earthwork for a line from Sakri to Jaynagar on the Nepāl frontier was completed as a relief work during the famine of 1897; and the line, which has now been opened, should tap a large grain supply from Nepāl. Including 769 miles of village tracks, the District contains 1,949 miles of roads, of which 47 miles are metalled. The most important is the main road running eastwards from Muzaffarpur through Darbhangā town and Narahiā to Purnea. Roads radiate from Darbhangā town and the subdivisional head-quarters to the most important places in the interior, and from Darbhangā town and Sakri, Jhanjhārpur, and Nirmāli railway stations to the Nepāl frontier. Most of the roads were constructed as relief works in the famine of 1874, and others by the road cess committee which was established in 1875, and by its successor, the District board. The total mileage is now about three times what it was thirty years ago. Many of the roads in the low-lying tract in the central and south-eastern part of the District are impassable during the rains; their high embankments are frequently breached in time of flood, to avoid which an enormous amount of bridging would be necessary. Much has been done in this direction in recent years: five pontoon bridges have been erected at different points on the Gandak and the Bāghmati; and the road from Darbhangā town to Jaynagar on the frontier, which crosses all the rivers in the west of the Madhubanī subdivision, has been bridged throughout at the cost of the Darbhangā Rāj. In Samāstipur, where the country is high, and comparatively little embanking or bridging is required, most of the roads are in good order and can be used at all seasons of the year.

The Ganges is navigable by steamers throughout the year; and a daily service, which plies up the river from Goalundo, calls at Hardāspur in the extreme south-west corner of the Samāstipur subdivision. The Burhī Gandak river is navigable by boats of 1,000 maunds burden at all seasons, but its boat traffic has much decreased since the opening of the railway. Boats of 400 or 500 maunds can pass up the Bāghmati except in a very dry season. The other rivers in the District are navigable in the rainy season only, and are not much used even then owing to their liability to floods. The principal ferries are those on the Burhī Gandak and Bāghmati rivers, the most important being at Māgardihi Ghāt (at Samāstipur) and Singiā Ghāt (atRuserā) on the Burhī Gandak, and at Kalyā Ghāt and Haiā Ghāt on the Bāghmati.

Whenever the normal rainfall falls short of the average or is badly

distributed, the crops suffer; the greater part of the cultivated area is under winter rice, and the most serious results ensue from a premature cessation of the monsoon. The first severe famine of which there is any reliable record is that of 1874. The rains of 1873 commenced late, were insufficient to bring even the *bhadoi* crops to full maturity, and ceased in September with a deficiency in some parts of no less than 28 inches. The rice crop was very short everywhere, and in the head-quarters subdivision it was almost wholly destroyed. Relief operations on a lavish scale were undertaken in ample time, and serious loss of life was prevented. Severe local scarcities again occurred in 1875–6, 1888–9, and 1891–2. In 1895 the harvest was again a short one, and this was followed by the great crop failure of 1896, which affected the whole District except two of the three *thānas* of the Samāstipur subdivision; in the third, Wārisnagar, the distress was less acute than in the rest of the District, while it was greatest in the west of the head-quarters and Madhubanī subdivisions. Relief was again promptly given, and the total expenditure amounted to nearly 37 lakhs. The numbers in receipt of relief rose to 236,000 at the end of May, 1897, of whom 147,000 persons with 10,000 dependents were engaged on relief works and 79,000 were in receipt of gratuitous relief. The imports of grain into the District during the famine amounted to more than 44,000 tons. The total number of persons relieved, reckoned in terms of one day, was 40,911,000 units, or more than in any other Bengal District; but the death-rate was unusually low during the greater part of the distress, and the recovery of the District after the famine was rapid.

Famine.

For administrative purposes the District is divided into three subdivisions, with head-quarters at DARBHANGĀ, MADHUBANĪ, and SAMĀSTIPUR. The staff subordinate to the District Magistrate-Collector at head-quarters consists of an Assistant Magistrate-Collector and five Deputy-Magistrate-Collectors, while the Madhubanī and Samāstipur subdivisions are each in charge of a Joint or Assistant Magistrate assisted by a Sub-Deputy-Collector.

Administration.

The civil courts subordinate to the District Judge are those of three Munsifs at Darbhangā, three at Samāstipur, and two at Madhubanī; civil cases above a certain value are disposed of by two Subordinate Judges at Muzaffarpur. The criminal courts include those of the Sessions Judge and District Magistrate and of the Joint, Assistant, and Deputy-Magistrates referred to above. There is little heinous crime, the commonest offences being theft and burglary.

At the time of Todar Mal's assessment Darbhangā formed a portion of *sarkār* Tirhut, which belonged to the northern division of the *Sūbah* or province of Bihār. The 42 *parganas* for which figures are available returned a productive area of 320 square miles. The revenue assessed

on them was 2·31 lakhs, giving an incidence of Rs. 1–2 per cultivated acre, as compared with Rs. 1–7 in Tirhut as a whole, Rs. 1–8 in Sāran, and Rs. 1–6–3 in Champāran. The inference is that Darbhangā was then in a more backward agricultural condition than the rest of North Bihār, and it is probable that the more remote parts were in the hands of refractory and independent *zamīndārs*. The subsequent development of the District may be gauged from the fact that it now contains a cultivated area of 2,510 square miles, so that cultivation has increased eightfold in the last three centuries. The present revenue is 7·97 lakhs, or more than three times what it was in Akbar's reign; but the incidence per cultivated acre is under 8 annas, or less than half what it was at Todar Mal's assessment. At the Decennial Settlement in 1790, which was made permanent in 1793, little more than a quarter of the total area covered by the present District was dealt with and nearly two-thirds of the present cultivated area escaped assessment, the revenue demand being 5·48 lakhs on an area of 892 square miles. Proceedings were afterwards instituted to resume lands held revenue-free under illegal or invalid titles, and 3·61 lakhs had by 1850 been thus added to the land revenue. In 1903–4, of the total current demand 7·86 lakhs was payable by 13,752 permanently settled estates and Rs. 10,500 by estates held direct by Government, while 2 small estates are temporarily settled. Owing to the backward state of the District at the time of the Permanent Settlement, the incidence of revenue per acre is only Rs. 0–5–10. One of the most remarkable features in the revenue administration is the increase in the number of permanently settled estates owing to partition; these numbered 8,257 in 1879–80, while at the time of the Permanent Settlement there were only 532.

The District has recently (1896–1903) been surveyed, and a record-of-rights has been prepared. It was found that settled and occupancy ryots hold 83 per cent. of the total occupied area, and these pay cash rents for 92 per cent. of the area held by them; while non-occupancy ryots and under-ryots pay produce rents for 7 and 53 per cent. respectively of the areas held by them. Produce rents are of three kinds: *batai*, *bhaoli*, and *mankhap*. In the first case the actual crop is divided between the landlord and the ryot; in the second the value of the crop is appraised on the ground shortly before the harvest, and a share is paid by the ryot to the landlord either in cash or kind; while in the third case the ryot pays a certain quantity irrespective of the out-turn. Very high rents are charged for land growing valuable crops, such as tobacco, poppy, and chillies, and it is not unusual to find tobacco lands assessed at Rs. 15 to Rs. 20 per acre. The average rates for good rice lands are from Rs. 4 to Rs. 5 per acre, and for lands producing both an autumn and a spring harvest from Rs. 5 to Rs. 6. On the whole the

highest rents are found in Samāstipur and the lowest in Madhubanī. The only peculiar tenure in the District is that known as *jaidādi*, which prevails in the low lands of the Baherā *thāna*. As this tract is extremely liable to inundation, the ryot pays rent not on his whole holding but only on such part of it as actually produces a crop, the cropped area being measured for this purpose just before the harvest and a rate previously agreed upon applied to it. For the whole District ryots at fixed rents pay Rs. 1-12-0 per acre, settled and occupancy ryots Rs. 3-12-6, and non-occupancy ryots Rs. 4-7-10 per acre, the average for the three classes being Rs. 3-12-4 per acre, while under-ryots pay Rs. 4-8-4 per acre.

The following table gives the collections of land revenue and of total revenue (principal heads only), in thousands of rupees:—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	8,09	7,97	7,91	7,99
Total revenue . .	14,30	18,18	19,59	20,47

Outside the municipalities of DARBHANGĀ, RUSERĀ, SAMĀSTIPUR, and MADHUBANĪ, local affairs are managed by the District board, with subordinate local boards in each subdivision. In 1903-4 its income was Rs. 3,88,000, of which Rs. 2,30,000 was derived from rates; and the expenditure was Rs. 4,13,000, including Rs. 2,33,000 spent on public works.

The District contains 11 police stations and 12 outposts. The force subordinate to the District Superintendent consists of 3 inspectors, 36 sub-inspectors, 27 head constables, and 403 constables; the rural police force consists of 286 *daffadārs* and 4,462 *chaukīdārs*. The District jail at Darbhangā town has accommodation for 355 prisoners, and subsidiary jails at Madhubanī and Samāstipur for 37.

Education, though backward, has made considerable progress in recent years. In 1901, 3·5 per cent. of the population (7·1 males and 0·1 females) could read and write. The number of pupils under instruction increased from 24,864 in 1892-3 to 34,927 in 1900-1. In 1903-4, 42,545 boys and 2,604 girls were at school, being respectively 20·0 and 1·1 per cent. of the children of school-going age. The number of educational institutions, public and private, in that year was 1,692, including 19 secondary, 1,151 primary, and 522 special schools. The total expenditure on education was Rs. 1,21,000, of which Rs. 9,000 was met from Provincial funds, Rs. 48,000 from District funds, Rs. 3,000 from municipal funds, and Rs. 39,000 from fees.

In 1903 the District contained 16 dispensaries, of which 8 had accommodation for 172 in-patients. The cases of 239,000 out-patients and 2,800 in-patients were treated during the year, and 6,000

operations were performed. The expenditure was Rs. 60,000, of which Rs. 900 was derived from Government contributions, Rs. 29,000 from Local and Rs. 7,000 from municipal funds, and Rs. 26,000 from subscriptions.

Vaccination is compulsory only in municipal areas. In 1903–4 the number of persons successfully vaccinated was 90,000, representing 32·2 per 1,000 of the population, or rather less than the general ratio for Bengal.

[J. H. Kerr, *Settlement Report* (Calcutta, 1904); L. S. S. O'Malley, *District Gazetteer* (Calcutta, 1907).]

Darbhangā Subdivision.—Head-quarters subdivision of the Darbhangā District, Bengal, lying between 25° 38′ and 26° 26′ N. and 85° 41′ and 86° 44′ E., with an area of 1,224 square miles. The population rose from 1,048,806 in 1891 to 1,065,595 in 1901, when there were 871 persons to the square mile. The greater part of the subdivision is a low-lying plain, intersected by numerous streams and marshes; and the chief crop is winter rice, which, when not submerged at too early a date by floods, yields an abundant out-turn. The subdivision contains two towns, DARBHANGĀ (population, 66,244), its head-quarters, and RUSERĀ (10,245); and 1,306 villages.

Darbhangā Rāj.—An estate in Bengal. The Darbhangā family traces its origin to one Mahes Thākur, who is said to have come from Jubbulpore about the beginning of the sixteenth century. He took service as a priest with the descendants of Rājā Siva Singh, who still exercised a nominal supremacy in Tirhut; but when they collapsed before the advancing Muhammadan power, Mahes Thākur induced Akbar to grant him what are now the Darbhangā Rāj estates. He and his descendants gradually consolidated the power of the family in both agrarian and social matters; and though, owing to recusancy at the Permanent Settlement, the Rājā of that period was for some time deprived of a portion of his property, the British Government eventually recognized him. During the first half of the nineteenth century, owing to mismanagement and litigation, the estate fell into considerable difficulties. But the litigation had the effect of deciding that the estate was impartible and that the inheritance to it was regulated by primogeniture; and owing to a long minority of over twenty years from 1860 onwards, during which the estate was under the Court of Wards, it is now in a very flourishing condition. Darbhangā town has been the head-quarters of the family since 1762, prior to which date they resided at Madhubanī. The present Mahārājā Bahādur, Sir Rāmeswar Singh, K.C.I.E., succeeded on the death of his brother in 1898.

The estates at present comprise lands situated in the Districts of Darbhangā, Muzaffarpur, Gayā, Monghyr, Purnea, and Bhāgalpur, with a total area of more than 2,410 square miles. The Mahārājā is also the

owner of house property in the towns of Darbhangā, Muzaffarpur, Patna, Benares, Calcutta, Allahābād, Darjeeling, and Simla, and of the indigo concerns of Sarahiā and Bachaur in Muzaffarpur District, Pandaul in Darbhangā, and Gondwāra in Purnea. The rent roll exceeds 32 lakhs, and the Government revenue, including cesses, is $7\frac{1}{4}$ lakhs. The present system of management was introduced when the estate was under the Court of Wards, and is very complete. The estate is divided into circles of from 50 to 200 villages each; each circle is in charge of a sub-manager, who is responsible to the Mahārājā for its efficient working, and under each sub-manager there are usually several *tahsīldārs* in charge of groups of villages or rent collectors. The average rent payable by the occupancy ryots of the Rāj is believed to be about Rs. 4 per acre.

Darbhangā Town.—Head-quarters of Darbhangā District, Bengal, situated in 26° 10′ N. and 85° 54′ E., on the left bank of the Little Bāghmati river. It probably takes its name from one Darbhangi Khān, a Muhammadan freebooter; the traditional derivation from *dar-i-Bangal*, or 'gate of Bengal,' seems to be etymologically impossible. The population of the town increased from 53,744 in 1872 to 65,955 in 1881 and to 73,561 in 1891, but fell again to 66,244 in 1901. This decrease, however, is to a great extent fictitious: the population was abnormally large in 1891 on account of the presence of some 5,000 Brāhmans who had come to partake of a feast given by the Mahārājā, while in 1901 the Census was taken on an auspicious day for weddings in connexion with which a large number of persons were temporarily absent. In 1901 the inhabitants included 47,946 Hindus, 18,122 Muhammadans, and 171 Christians. Communications by road are good in all directions. It is connected with the north Ganges railway system by a line from Samāstipur on the south, which branches off at Darbhangā in two directions, the first north-west to Samāstipur and the second north-east to Khanwā Ghāt on the Kosi. A considerable trade is carried on, the principal exports being oilseeds, *ghī*, and timber; and the imports, food-grains, salt, gunny cloth, piece-goods, lime, and iron. Darbhangā was constituted a municipality in 1864. The income during the decade ending 1901–2 averaged Rs. 42,000, and the expenditure Rs. 35,000. In 1903–4 the income was Rs. 55,000, of which Rs. 23,000 was derived from a tax on persons (or property tax), and Rs. 11,000 from a tax on houses and lands; and the expenditure was Rs. 38,000. A large market-place has been constructed between the hospital and the Mahārājā's garden. The whole country around the town becomes a swamp during the rains, being subject to inundations from the Kamlā and Little Bāghmati; and the civil station and public offices were therefore moved in 1884 to the suburb of Laheriā Sarai at the extreme south of the town. The District

jail has accommodation for 355 prisoners, who are employed on oil-pressing, weaving, the manufacture of *newār*, ropes, matting, &c.

Darīābād.—Town in Bāra Bankī District, United Provinces. *See* DARYĀBĀD.

Daria Kherī.—*Thakurāt* in BHOPĀL AGENCY, Central India.

Darjeeling District.—Frontier District forming the most northerly portion of the Bhāgalpur Division of Bengal, lying between 26° 31′ and 27° 13′ N. and 87° 59′ and 88° 53′ E., with an area of 1,164 square miles. It runs up between Nepāl on the west and Bhutān on the north-east to Sikkim on the north. It is separated from Sikkim by a series of rivers and mountain torrents, and from Nepāl by the Singālilā chain of mountains; on the east and south it marches with the British Districts of Jalpaigurī and Purnea.

Physical aspects.

The District contains two distinct tracts: the ridges and deep valleys of the Lower Himālayas, and the *tarai* or level country at their base. The elevation of the latter is only 300 feet above sea-level; and the mountains tower abruptly from the plains in spurs reaching to 6,000 and 10,000 feet, many of them densely clothed with forest to their summits. The mountain slopes, from about 6,000 feet downwards, are dotted with trim tea gardens interspersed with small tracts of land reserved by Government for native cultivators. The *tarai* was formerly overgrown with dense malarious jungle, amid which the aboriginal tribes of Mechs, Dhimāls, and Kochs burnt clearings and reared crops of rice and cotton on a system of primitive nomadic husbandry; but it has now been extensively cleared for settled tillage and for tea gardens.

The scenery is of a magnificent character. The spectator in Darjeeling town stands on the stage of a vast amphitheatre of mountains, which in the spring form a continuous snowy barrier extending over 150 degrees of the horizon from Gipmochi on his right to Sandakphū on his left. The sides of the amphitheatre are formed by the Singālilā chain 20 miles to the west, and by the loftier Chola range 40 miles away on the east. In front of him, at a distance of only 45 miles, the great twin peaks of Kinchinjunga tower above the titanic group of snowy mountains which fills the northern horizon. Flanked on the west by Kabru and Jāno, and on the east by Pandim, Narsingh, and D2, Kinchinjunga completely dominates the landscape. The rising sun sheds a golden radiance on the eastern slopes, which turns to dazzling whiteness as the day wears on. At evening the western flanks catch all the rosy glow of sunset, and as the sun sinks behind the hills the crimson hues fade away only to reappear in a delicate afterglow. At last even this disappears; but if the moon be near the full, its light streams down upon the snows, outlining their contours with an awful purity. Unfortunately, except for a short time in May and in the early

winter months, this gorgeous panorama is more often than not hidden by a thick mist, which lifts only at rare intervals for a few hours at a time.

From the great backbone of the Himālayas, which runs east and west along the northern boundary of Sikkim, the SINGĀLILĀ range juts nearly due south, forming the boundary, first between Nepāl and Sikkim, and then between Nepāl and Darjeeling District. At the station itself three minor ridges converge. One climbs due west to TANGLŪ (10,074 feet) on the Singālilā range; a second branches east to Senchal (8,163 feet) and north-east to Pashok (3,300 feet); the third descends due south to KURSEONG, and thence south-east to the plains. It is along the last ridge that the Darjeeling-Himālayan Railway climbs. The highest peaks on the Singālilā range are PHALŪT (11,811 feet), SABARGAM (11,636 feet), and SANDAKPHŪ (11,930 feet). The station of Darjeeling itself has an elevation of 7,002 feet at the Chaurāsta, or four cross-roads.

The mountains are roughly divided for administrative purposes into three distinct tracts. The ridges above 6,000 feet and the valleys below 3,000 feet are 'reserved' as forests; between these altitudes the slopes east of the Tīsta river have been set apart for native cultivation, which usually extends down to about 2,000 feet; while in the country west of that river little but tea is grown.

The chief rivers are the TĪSTA, the Mahānadī (MAHĀNANDĀ), and the Bālāsan. The chief tributaries of the Tīsta are the Rangpo and Rillī on the left bank, and on the right the Great Rangīt, Rangjo, Rayeng, and Sivok; a little below its junction with the Great Rangīt, where one of the most picturesque views in the District can be obtained, the Tīsta is spanned by a fine suspension bridge. The Mahānadī is a smaller stream and obtains its full volume only after leaving the District. The Bālāsan takes its rise a few miles south-west of Darjeeling and after a southerly course enters the *tarai*, when it divides into two streams, one of which, the New Bālāsan, branches off and joins the Mahānadī, while the parent stream continues its southerly course into Purnea District. Its two main tributaries in Darjeeling District are the Rangbang on the right, and the Rinchingtong on the left bank. The Rammān river, which is a tributary of the Great Rangīt, and which forms for some distance the boundary between the District and Sikkim, is crossed by a curious natural bridge of stone between the junction of the Ratho and the Shirī with this river.

Gneiss of the well-foliated type, frequently passing into mica schist, covers the greater portion of the District. Submetamorphic or transition rocks, known as the Dāling series, are well represented in the Tīsta and the Rangīt valleys, and in the outer hills between Kurseong

and Tindhāria, and near Pankhābāri. They mainly consist of light green and dark greenish-grey, slightly greasy slates passing insensibly into ordinary clay slates, more or less earthy or silvery according to the degree of metamorphism they have undergone. Associated with them occur bands of quartzite and quartz flags, and occasionally hornblende schist, sometimes slightly calcareous and passing into dolomite. Upper Tertiary rocks (sandstones, conglomerates, and clays) occur as a narrow band fringing the base of the Himālayas, while intervening between the Submetamorphics and the Tertiaries there is a thin band of Lower Gondwāna rocks, including various alternations of sandstone or quartzite, shales, slates, and beds of friable coal[1].

The mountain slopes, where not cleared for cultivation, are densely clad with shady forests. Along the banks of the larger streams and from 1,500 to 2,000 feet up the mountain ridges is a tropical forest, which extends also across the level *tarai* at the base of the outer spurs. On dry slopes in the hills and along old river-beds in the *tarai* there is little undergrowth, but elsewhere this is dense and luxuriant. The important trees will be mentioned in the section on Forests. Ferns are very numerous and mosses are abundant, while epiphytic orchids and *Vacciniaceae* are plentiful. The orchids, however, cease to be abundant at 8,000 feet, from which level rhododendrons become common. At 10,000 feet on Phalūt gregarious conifers appear. The sub-Alpine element, consisting of *Gentiana*, *Primula*, *Pedicularis*, *Meconopsis*, and similar genera, is not largely represented within the District, which only touches this zone on Phalūt in the west and on Rishi La in the east; the truly Alpine zone of vegetation is not met with.

The black bear (*Ursus torquatus*) and a smaller bear (? *Melursus ursinus*) are met with between 3,000 and 11,000 feet, and are seen most often in the rains when the maize is ripening. Leopards are occasionally found at all altitudes, and the cat-bear (*Aelurus fulgens*) from 7,000 to 10,000 feet. A goat antelope, the *serow* (*Nemorhaedus bubalinus*), sometimes incorrectly identified with the *thār*, is still found between 5,000 and 10,000 feet. A few *goral* (*Cemas goral*) roam the crags between 4,000 and 6,000 feet, and barking-deer (*Cervulus muntjac*) are common. Musk deer are very rare and are found only above 10,000 feet. In the *tarai*, tiger, rhinoceros, deer, wild hog, and a species of dwarf hog (*Sus salvanius*) are not uncommon, and a few elephants are still found. Good mahseer fishing is to be had in the Tīsta.

[1] *Memoirs, Geological Survey of India*, vol. xi, pt. i, 'Geology of Darjeeling and Western Duārs,' by F. R. Mallet; *Records, Geological Survey of India*, vol. xxiii, pt. iv, 'The Darjeeling Coal between the Lisu and the Ramthi Rivers,' by P. N. Bose; and vol. xxiv, pt. iv, 'Further Note on the Darjeeling Coal Exploration,' by P. N. Bose.

At Darjeeling town (7,346 feet), the mean temperature is about 42° in the cold season, and rises to 59° in May. It remains steady at about 60° from June to September, and then falls rapidly to 41° in January. The lowest average minimum temperature is 35° in January, and the highest mean maximum 66° in July and August. Humidity is high, and rainfall is general and very heavy from June to September, especially on the lower slopes. The annual fall for the whole District averages 126 inches, of which 11 inches are received in May, 27 in June, 35 in July, 23 in August, and 16 in September. In such hilly country the rainfall varies widely over the District. The ridges nearest to the plains catch the full force of the monsoon and have double the fall of those farther to the north.

On September 24, 1899, the District was visited by a terrible cyclone accompanied by excessive rainfall, which caused great loss of life and property, especially in DARJEELING TOWN. Up to that date the fall had been 17 inches in excess of the average, and during the storm a fall of 29·4 inches was recorded in the Tiger Hill tea estate south-west of Ghum. The loss of life amounted to 300, including 10 Europeans and 62 natives in the town, and 67 at Pul Bāzār, where the Little Rangīt rose 30 to 50 feet, carrying all before it. Damage to public property was estimated at nearly 8 lakhs, of which repairs to Provincial roads and bridges cost 5 lakhs, the chief items being the Darjeeling hill cart road ($1\frac{3}{4}$ lakhs) and the Tīsta valley road ($1\frac{1}{4}$ lakhs). The injury to private property amounted to $15\frac{1}{2}$ lakhs, the tea industry suffering to the extent of nearly 11 lakhs. The earthquake of 1897 also caused great damage in Darjeeling town.

History.

The history of Darjeeling presents a late chapter in the extension of British rule. The Gurkha War of 1814–6 first brought the Company into direct relations with this region. It was then found that the aggressive Gurkhas had appropriated from the Rājā of Sikkim the Morang or *tarai* portion of the present District; and it was one of the articles of the treaty of 1816 that this strip should be ceded to the British, who immediately restored it to Sikkim. In 1835, under the Governor-Generalship of Lord William Bentinck, the nucleus of what was originally known as 'British Sikkim' was created by the purchase, from the Rājā of Sikkim, of the sanitarium of Darjeeling, with some of the surrounding hills, in consideration of an allowance of Rs. 3,000, afterwards increased to Rs. 12,000 per annum. This allowance was finally stopped, in consequence of the Rājā's improper conduct in connexion with the Sikkim expedition of 1888. The ceded tract, which contained about 138 square miles, is described in the deed of grant as 'all the land south of the Great Rangīt river, east of the Bālāsan, Kāhel, and Little Rangīt rivers, and west of the Rangbī and Mahānandā rivers.' Darjeeling soon became

a favourite summer retreat for the officials of Bengal and their families, and it was established as a sanitarium for invalided European soldiers. In 1849 Dr. Hooker paid it a visit, and described his experiences in his well-known and most interesting *Himālayan Journals* (2 vols., 1854). His visit was also productive of important political consequences. With the sanction of the British Government and with the express permission of the Rājā of Sikkim, he had crossed the frontier into that State, accompanied by Dr. Campbell, the Superintendent of Darjeeling District. There they were treacherously seized and imprisoned by the authority of the Rājā's *dīwān* or minister. A military expedition was dispatched to rescue the prisoners and avenge the insult; the yearly allowance granted to the Rājā was stopped, and the Sikkim *tarai*, at the foot of the hills, was annexed, while British territory in the mountains was considerably extended. In all, about 640 square miles of land were acquired on this occasion. Finally in 1866 a hilly tract of 486 square miles, east of the Tīsta, which was annexed from Bhutān in 1865 and now forms the Kālimpong police-circle, was incorporated in the District.

Population.

The population increased from 94,996 in 1872 to 155,645 in 1881, to 223,314 in 1891, and to 249,117 in 1901. The Census of 1872 was admittedly inaccurate, and in 1881 there were doubtless many omissions; but even after liberal allowances have been made for error, the figures show a remarkable growth of population. The climate of the hills is very healthy and the death-rate low; but the *tarai* is notoriously malarious, and the mortality there is always very heavy. In the Silīgurī *thāna* the recorded death-rate during the ten years ending 1901 averaged 59·8 per 1,000, and the birth-rate only 19·4. The birth-rate throughout the District is low, but this is partly owing to the preponderance of males among the large immigrant population, there being only 87 women to every 100 men in the District. More than three-quarters of the deaths are due to fever, and more than a tenth to dysentery and diarrhoea. In the hills goitre is endemic, and the number of deaf-mutes is also high.

The table below gives particulars of the population of each subdivision in 1901:—

Subdivision.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Darjeeling . .	726	1	181	133,386	184	+ 26·2	10,295
Kurseong . .	438	1	388	115,731	264	− 1·6	7,147
District total	1,164	2	569	249,117	214	+ 11·5	17,442

The two towns are DARJEELING, the head-quarters, and KURSEONG. The hilly part of the District contains nothing corresponding to a village in the ordinary sense of the word, as nearly all the land, with the exception of Government forest, is parcelled out into tea gardens and Government estates, or *khās mahāls*, and even in the *tarai* the social unit is not the village characteristic of the rest of India but the farm.

During the decade ending 1901 the greatest increase of population (55·9 per cent.) took place in Kālimpong, which had in 1891 only 65 persons to the square mile; here the waste land is being rapidly brought under cultivation by new settlers, chiefly from Nepāl, but it is still the most sparsely populated area in the District and supports only 101 persons to the square mile. The remainder of the head-quarters subdivision also showed a fair growth, the tea gardens adding 5,000, or more than 12 per cent., to their population. The decrease in the Kurseong subdivision was chiefly due to the extreme unhealthiness of the Silīgurī *thāna*, where the loss would have been far greater but for the large influx of coolies for the tea gardens. Nearly half the total population are foreigners. The majority (76,000) are natives of Nepāl, but a large number also come from Chotā Nāgpur, the Santāl Parganas, Bihār, and the United Provinces. There is a steady flow of immigration from Sikkim to Kālimpong, where the land revenue assessment is very low. About half the people speak languages of the Tibeto-Burman family, of which nineteen different dialects were shown in the Census returns of 1901, the most common being Khambū, Murmī, Limbū, Lepchā, and Mangar. Nearly one-fifth speak Khas, a bastard form of Hindī derived by the Khas from their Hindu ancestors; it is known as Khas-kura, and has become the *lingua franca* of Nepāl. Bengali and Hindī are spoken by people from the plains, while immigrant Oraons, Mundās, and Santāls from the Chotā Nāgpur plateau speak their own languages. In 1901, 187,869 persons, or more than three-quarters of the population, including most of the Nepālese, returned themselves as Hindus. Buddhists numbered 44,044, including the Murmīs, Lepchās, and Bhotiās. Musalmāns, found chiefly in the Silīgurī *thāna*, formed less than 4 per cent. of the total population, and Christians and Animists between 1 and 2 per cent. each.

Considerably more than half the population (134,000) are Nepālese, and of the rest 29,000 are Rājbansis, or rather Kochs, 10,000 Lepchās, and 8,000 Bhotiās. All the great Nepāl castes are well represented, the most numerous being the Khambū, Murmī, Limbū, and Khas. Lepchā is the nickname given by the Nepālese to a Mongoloid tribe who call themselves Rong, and claim to be the aboriginal inhabitants of SIKKIM; an account of them will be found in the article on that State. Of the Bhotiās, 3,446 are known as Sharpā Bhotiās and come

from Nepāl; 2,357 come from Bhutān, and 1,547 from Sikkim. An account of these people will be found in the article on BHUTĀN. The Oraons, Mundās, and Santāls reside almost exclusively in the Silīguri *thāna*, where they are employed as coolies on the tea gardens. Nearly 1,700 Tibetans were enumerated in the District. The number of Europeans was 1,292. Of the total population, 78 per cent. are engaged in agriculture (half of them on tea gardens), 7 per cent. in manual industries, 1 per cent. in commerce, and the same proportion in the professions.

Christians number 4,467. The Church of Scotland Mission works among the hill tribes, and has secured a large number of converts, principally among the Lepchās, of whom 1,300 are Christians. The mission has branches in Sikkim, the Duārs, and Kālimpong, the last being the most important. It does most useful educational work and maintains 58 schools with 1,655 scholars; the Colonial Homes at Kālimpong were started under its auspices. Great progress has been made during the last decade, the number of native Christians having risen from 298 to 2,829. A Roman Catholic mission has branches at Darjeeling and Kurseong, and a second Roman Catholic mission works at Pedong, under the Bishop of Tibet, with a branch at Maria-bastī.

Agriculture.

Agriculturally the District is divided into three tracts: the mountains west of the Tīsta river, Kālimpong, and the *tarai*. At the time of cession the western mountains were almost wholly covered with forest, and were very sparsely populated; almost all the slopes are now under tea, and two-thirds of the population outside the municipality and cantonments are resident on the tea gardens. Kālimpong contains only four tea gardens, and the greater part of the area is reserved for native cultivation, five-sixths of the inhabitants being settled on the Government estate. The *tarai* contains a number of tea plantations along the foot of the hills, but there are also extensive areas under ordinary cultivation, and the tea garden population is barely one-fifth of the total.

A distinctive feature of Himālayan agriculture is the terracing of the mountain slopes for rice cultivation. On steep slopes the labour of revetting the narrow terraces with stones is very great; but as the site of a rice-field is always selected so that it can be irrigated from some stream, the crop is a certain one and amply repays the labour expended. The incline of the slope, the aspect, and the elevation are important factors in the relative fertility of such lands. Many of the terraces are too narrow to admit the use of a plough, and these are cultivated with a hoe. The nomadic method of agriculture known as *jhūm*, which consists in burning down a fresh patch of jungle land each successive year, has practically ceased, as most of the forests in the

District are now reserved by the Forest department. Bengali and Nepālese cultivators use the plough, and plough cultivation has also been adopted by the aboriginal tribes, especially east of the Tīsta. The hill chopper known as *dao* or *kukri* is widely used for all rustic operations. The Nepālese are by far the most enterprising cultivators, and special measures are necessary to protect the indigenous Lepchās from being ousted by them.

The principal agricultural statistics of the District for 1903–4 are shown below, areas being in square miles:—

Subdivision.	Total.	Cultivated.	Cultivable waste.	Forests.
Darjeeling . .	726	116	27	326
Kurseong . .	438	135	17	107
Total	1,164	251	44	433

Rice, which occupies nearly a third of the cultivated area, is the only food-grain grown in the *tarai*, the winter crop being the most important. In the hills Indian corn forms a valuable staple in Kālimpong, and the area under it amounts to more than three-quarters of the net cropped area. The average yield of Indian corn on the best hill lands is about 18 maunds per acre, and on inferior lands 9 maunds. In the *tarai* the yield of rice per acre varies from 4 to 10 maunds. In the hills, millets, such as *maruā* (*Eleusine coracana*), wheat, potatoes, and cardamoms are grown wherever practicable. Subordinate crops in the plains are cotton, jute, which is encroaching on the rice area, pulses, oilseeds, and sugar-cane.

The staple industry of Darjeeling is the cultivation and manufacture of tea, conducted almost entirely by means of English capital and under skilled European supervision. Its introduction into Darjeeling is due to Captain James, who persuaded Government to obtain seed from China, which he distributed among residents of the District to experiment with. The experiments were successful, and in 1856 the first tea gardens were opened at Alubāri, Pandam, and Steinthal. The industry has prospered; the number of gardens in 1903 was 169 with an area of 242 square miles, the acreage actually under tea representing 32 per cent. of the net cropped area of the District and the output of tea exceeding 12,000,000 lb. The speciality of Darjeeling teas is their fine flavour, which always commands high prices and compensates for a smaller yield per acre than is obtained in the plains. The principal pests which tea planters have to contend with are the red spider, green-fly, and mosquito blights. The last causes most trouble in the *tarai* and the lower ranges; while red spider is a terrible scourge on gardens at a higher elevation.

The supply of labour is on the whole plentiful and of good quality, as the work is comparatively light and well paid. In the hills the coolies are mainly Nepālese, while in the *tarai* Santāls and kindred tribes predominate; women and children are largely employed in plucking and sorting.

The cultivation of those species of cinchona which contain quinine and allied febrifuge alkaloids was begun in 1864 in the Rangjo valley 12 miles south-east of Darjeeling, and in 1874 cinchona febrifuge was manufactured for the first time in the Mangpū factory. In 1887 the manufacture of sulphate of quinine was commenced by a process of extraction by fusel oil, and has since been greatly extended. The issues of quinine in 1903–4 amounted to over 12,000 lb., of which 3,900 lb. were made up by the Jail department into pice-packets, each containing 7 grains, for sale at post offices. In 1904 the Government cinchona plantations comprised 900 acres in the Rangbī and Mangpū divisions in the Rangjo valley, 600 acres in the Sītong and Lābda divisions in the Rayeng valley, and 360 acres in the Rangpo valley; the total number of plants approached $4\frac{1}{2}$ millions.

A good deal has been done to distribute improved seed for various crops, and some remarkably fine maize has been grown in Kālimpong from American seed. Efforts have been made to extend the growth of potatoes, but blight has proved very destructive hitherto. Oranges and other fruit trees have been successfully grown at Kālimpong. Rice cultivation is spreading steadily in the mountains, especially in the east of the District. Little use has been made of the Agriculturists' and Land Improvement Loans Acts until recently; but Rs. 2,800 was advanced under the former Act in 1906 to the ryots in the Kālimpong Government estate in consequence of the partial failure of the maize crops on which they mainly depend.

The common domestic animals of the *tarai* do not differ from those found elsewhere in Bengal; but in the hills there are two special breeds of mountain cattle, the Siri and the Nepāli, a cross between the two being called *kachchā* Siri. The former are large and rough-coated, and the latter small and smooth-skinned; both breeds are good climbers, and thrive in the forests. The Nepālese cultivators use a few bullocks for their ploughs, but most of the animals are kept for slaughter or transport. The Sharpā Bhotiās from Nepāl and other Nepālese tribes, as well as the Bhutānese Bhotiās and Lepchās, graze large herds of buffaloes and cows. The small but sturdy breed of Bhotia ponies introduced from Tibet and Bhutān is well-known. They are coarse-bred animals with upright shoulders, ugly heads, and great bone; but they are valued for their sure-footedness and great endurance, and are used both as pack animals and for riding. Mules are imported from Tibet to Kālimpong, where Government buys them for transport. The Nepālese Gurungs

graze large flocks of sheep, taking them to the heights during the rains, and in the cold season bringing them down to the plains for sale. The principal pasture grounds are the 'reserved' forests. In the cold and hot seasons the lower ranges are used; but, as the rains approach, the scourge of leeches drives the cattle and sheep up to the higher mountains between 10,000 and 12,000 feet. English poultry have been imported and have retained their original characteristics to a remarkable degree. An important fair is annually held at KĀLIMPONG.

Irrigation is not practised on a large scale, but throughout the *tarai* and in the hills natural facilities are industriously utilized wherever they are to be found.

Forests, etc.

The 'reserved' forests cover an area of 433 square miles and, with the exception of a few small areas under the Deputy-Commissioner, are worked by the Forest department. There are probably few places in which so many different types exist within so small an area. Above 8,000 feet clumps of silver fir (*Abies Webbiana*) clothe the grassy slopes, which are dotted here and there with the whitened stems of dead trees. These, which gradually merge into rhododendron forest, are so inaccessible as to yield no profit. Lower down are bamboos, which at 6,000 feet give way to forests of chestnut, maple, oak, magnolia, and laurel, the chief source of supply of timber and firewood for the station of Darjeeling. Still lower the oak disappears, and maple, birch, alder, and *Bucklandia* are the chief species. These are again replaced at 4,000 feet by mixed timber, which, with the exception of the *tun* (*Cedrela Toona*), is of little value save for fuel. At 3,000 feet the upper limit of the *sāl* (*Shorea robusta*) is reached; and this tree is the chief constituent of the valuable forests in the lower hills, extending from the extreme west of the District to the Chel river on the east, where it ceases abruptly, probably owing to a change in the geological formation. Besides *sāl*, the *tarai* contain swamp, river-bed, and savannah forests, the last now rare owing to years of fire-protection. Cattle-grazing is ordinarily allowed. Regular plantations are few and unimportant; but some teak has been planted at Bāmanpokri, *Bucklandia* near Rangirun, and rubber in the low valleys. In 1903–4 the forests yielded a revenue of 2·62 lakhs. The Mechs in the plains and the Nepālese and Lepchās in the mountains collect for sale small quantities of minor jungle products, such as aconite, madder, and chiretta.

The mineral products include coal, iron, copper, calcareous tufa, and slate; but very few of these are now worked. In 1873 Mr. Mallet of the Geological Survey reported that the coal-measures, though easily exposed, were of a peculiarly friable character, and not worth exploiting. A colliery at Dāling had an output in 1900–1 of 1,489 tons, but was not worked in 1903–4. Copper ores (chiefly copper pyrites) occur in rocks of the Dāling series, and a licence to prospect for copper

and limestone at Kumai has recently been granted. Almost the only accessory minerals are kyanite, schorl, and garnet, the two last often forming large-sized crystals.

Coarse cotton cloth is woven by all the aboriginal tribes, especially by the Lepchās. There are breweries at Sonāda and St. Mary's, Kurseong, and the out-turn of beer in 1903–4 was 70,000 gallons. The railway works at Tindhāria employ a daily average of 110 operatives.

Trade and communications.

The main trade is with Calcutta, the chief exports being tea, jute, and gunny-bags, and the imports European piece-goods, kerosene oil, and salt. Rice is imported from Dinājpur and coal and coke from Burdwān. From Nepāl food-grains, cotton piece-goods, manufactured wool and hides, sheep, goats, cattle, and poultry are imported, in return for European piece-goods and cotton twist, salt, kerosene oil, tobacco, and food-grains. The trade with Sikkim is of much the same character, but less in extent. Most of the Bhutān trade passes through Jalpaigurī District. A little wool is brought from Tibet on mules to Kālimpong, whence it is carted to Silīgurī, but the trade is much hampered by the jealousy of the Tibetan authorities. The Darjeeling-Himālayan Railway carries most of the traffic in the west of the District, but in the east transport is by bullock carts and pack ponies along the Tīsta road. DARJEELING TOWN, KĀLIMPONG, KURSEONG, and SILĪGURĪ are the chief trade centres. Other places of less importance are Pedong on the Tibetan trade route, Sombāri at the end of the Chel valley, a mart for hill products, and Mātigarā and Naksalbāri in the *tarai*.

The Darjeeling-Himālayan Railway and the cart road over which it runs connect Silīgurī with Darjeeling. Other important roads are those connecting the Tīsta bridge with Darjeeling via Rangīt, which has been greatly damaged by landslips, and with Jorbangala via Pashok; the road from Silīgurī to Rhenok on the Sikkim frontier, and thence to the Jelep La pass; and the roads from Ghum via Simāna Bastī to Phalūt, from Rikyisum junction via Mimglās and Gorubathān to Jungi guard, from Kurseong via Pankhābāri to Mātigarā, from Mātigarā to Naksalbāri, and from Naksalbāri to Gārīdhura. There are in all 642 miles of roads, of which 343 miles are under the supervision of the District road cess committee, and the remainder under the Public Works department.

Administration.

For administrative purposes the District, which is 'non-regulation,' is divided into two subdivisions, with head-quarters at DARJEELING TOWN and KURSEONG. The staff subordinate to the Deputy-Commissioner at head-quarters consists of a covenanted Civilian and two Deputy-Magistrate-Collectors; a covenanted Civilian is in charge of the Kurseong subdivision and a Deputy-Magistrate-Collector is stationed at Silīgurī. The District staff also includes a Civil Surgeon, besides a resident medical officer at the Eden Sanitarium,

three Deputy-Conservators of forests, an Executive Engineer and an Assistant Engineer belonging to the Public Works department.

The courts are those of the District and Sessions Judge of Purnea, in whose jurisdiction Darjeeling is included, and of seven magistrates, four of whom also try petty civil suits. In the hills the people are remarkably law-abiding and heinous crimes are comparatively rare. Offences against the person, accompanied with violence, are however fairly common, while dacoities are occasionally committed in the *tarai*.

The District is divided into four separate tracts, in each of which a different revenue system prevails. In the original Darjeeling territory ceded in 1835 there was at first little demand for land, and applications were dealt with by the Superintendent at his discretion. In 1838, however, a very large number of applications for building sites was made to Government; and this led to the issue in 1839 of a set of rules for the grant of lands which, while protecting existing rights, placed certain restrictions on future grants. These were subsequently modified, and the lands in this tract may now be classified as freehold tenures, revenue-paying tenures, and lands held by Government.

In 1850 a second tract of 116 square miles in the north-west of the District was granted to Chebu Lāma for services rendered. Of this area, about 66 square miles were subsequently purchased by the Forest department in 1881, and the remainder is still held at a revenue of Rs. 1,000 fixed in perpetuity. The third tract embraces strips along the Nepāl boundary on the west, and along the Tīsta on the east, and Kālimpong. These are *khās mahāls*, or Government estates managed direct, and have undergone various resettlements. A poll tax was originally levied; but this was gradually replaced by block rates, which were uniform throughout each block, but which varied from block to block according to fertility and accessibility. The block rates have in their turn given way to a more elaborate classification of the lands within each block. Lastly the *tarai*, which was resettled in 1895–8, comprises chiefly holdings under *jotdāri* leases and tea grants. The rights of the *jotdārs* are heritable and transferable, and they pay rent direct to Government; subordinate to them are under-tenants (*chukānidārs*) who again sublet to *ādhiārs*. The latter are labourers paid in kind rather than tenants; they obtain from their lessor the seed, the use of ploughs, and often advances of food, and give him in return half the produce.

The tea lands are leased for varying terms up to thirty years. The rates of rent vary; near Darjeeling and in the *tarai* 6 annas an acre is the ordinary rate, while in Kālimpong, and in a few cases in Darjeeling, it is R. 1. Ordinary rents vary in the hilly area from 4 annas to Rs. 1–4 per acre, old fallow paying 2 or 3 annas per acre according to locality. In the *tarai* the prevailing rate is 3 annas for old, and 10 annas for new fallow, 4 to 10 annas for uplands (*faringati*), 8 annas for homestead,

Rs. 1–4 to Rs. 2 for lowlands (*rupit*), and Rs. 1–8 for tea and lands under *sāl* (*Shorea robusta*).

The following table shows the collections of land revenue and of total revenue (principal heads only), in thousands of rupees :—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	50	1,22	1,58	1,66
Total revenue . .	1,62	3,79	5,45	6,00

Outside the municipalities of DARJEELING and KURSEONG, local affairs are controlled by the Deputy-Commissioner, in his capacity of administrator of the Darjeeling Improvement Fund. In the Kālimpong Government estate they are looked after by the manager, who works through the village headmen; in the Kālimpong and Pedong bazars annual grants are made from the Improvement Fund, chiefly for the purposes of conservancy.

The District contains 4 police stations or *thānas* and 22 outposts, 4 being independent outposts and 14 patrol posts. In 1903 the force under the District Superintendent consisted of 4 inspectors, 20 sub-inspectors, 45 head constables, and 342 constables, making in all 411 men. In addition, the village watch consists of 177 *chaukīdārs*, including 24 *daffadārs*. A District jail at Darjeeling has accommodation for 132 prisoners, and subsidiary jails at Kurseong and Silīgurī for 32.

Owing largely to the work of the Church of Scotland Mission, education has made good progress during recent years, in spite of the difficulties of teaching a polyglot population scattered among the mountains. In 1901, 7 per cent. of the population (12 males and 1·4 females) could read and write. The total number of pupils under instruction increased from 3,255 in 1892–3 to 3,915 in 1900–1. In 1903–4, 3,731 boys and 515 girls were at school, being respectively 18·7 and 2·6 per cent. of those of school-going age. The proportion for boys is below the average for Bengal, but the percentage for girls ranks high. The chief educational institutions are St. Paul's School, St. Joseph's College, the Diocesan girls' school, and the Loretto Convent school at DARJEELING, the Victoria boys' school and the Dow Hill girls' school at KURSEONG, and the St. Andrew's Colonial Homes at KĀLIMPONG. The total number of educational institutions, public and private, in 1903–4 was 178, including 6 secondary, 150 primary, and 22 special schools. The total expenditure on education was Rs. 52,000, of which Rs. 30,000 was met from Provincial funds, Rs. 1,600 from municipal funds, and Rs. 5,000 from fees.

The District is well provided with hospitals and dispensaries, which numbered 12 in 1903, of which 6 had accommodation for 192 in-patients. At these the cases of 45,000 out-patients and 1,600

in-patients were treated during the year, and 1,250 operations were performed. The percentage of patients treated to population far exceeded the results attained elsewhere in Bengal outside Calcutta. The expenditure was Rs. 64,000 and the income Rs. 73,000, of which Rs. 20,000 was derived from Government contributions and the same sum from Local funds, Rs. 11,000 from municipal funds, and Rs. 17,000 from subscriptions. These figures are exclusive of the Lowis Jubilee Sanitarium in Darjeeling, the railway dispensary at Tindhāria, and two other private dispensaries.

Vaccination is not compulsory except in Darjeeling and Kurseong towns. In 1903–4 the number of persons successfully vaccinated was 11,000, or 50 per 1,000 of the population.

[L. S. S. O'Malley, *District Gazetteer* (1907); Sasi Bhusan Datt, *Tarai Settlement Report* (Calcutta, 1898); C. A. Bell, *Settlement Report of Kālimpong Government Estate* (Calcutta, 1905).]

Darjeeling Subdivision.—Head-quarters subdivision of Darjeeling District, Bengal, lying between 26° 52′ and 27° 13′ N. and 87° 59′ and 88° 53′ E., with an area of 726 square miles. The subdivision consists entirely of lofty mountains and deep valleys, and large areas are covered with forests. It is divided into two portions by the Tīsta, the tract east of that river being almost entirely reserved for native cultivation where the land is not covered by forests, while in the tract to the west the cultivable land is mostly under tea. The population in 1901 was 133,386, compared with 105,672 in 1891, and was contained in one town, DARJEELING (population, 16,924), the head-quarters, and 181 villages. The density is 184 persons to the square mile, but the Government estate of KĀLIMPONG, east of the Tīsta, is far more sparsely populated than the tract west of that river. There are cantonments at DARJEELING and LEBONG. Outside Darjeeling the most important market is in Kālimpong village.

Darjeeling Town.—Head-quarters of Darjeeling District, Bengal, situated in 27° 3′ N. and 88° 16′ E., in the Lower Himālayas, 379 miles from Calcutta by rail. The name Darjeeling (*Rdo-rje-gling*) means 'the place of the *dorje*,' the mystic thunderbolt of the Lāmaist religion, and is connected with the cave on Observatory Hill, which was a sacred spot prior to the British occupation of the country, and above which once stood the monastery, since removed to a site lower down the hill. At the Census of 1901 the population of the town with the two cantonments of Darjeeling and Lebong was 16,924, of whom 10,271 were Hindus, 4,437 Buddhists, 1,132 Christians, and 1,049 Musalmāns. The number of inhabitants during the summer months is much greater, and at a special enumeration in September, 1900, the population was 23,852. Darjeeling was acquired by the British Government in 1835 as a sanitarium, and it soon became a favourite summer

retreat for the officials of Lower Bengal and their families. It is now the summer head-quarters of the Lieutenant-Governor of Bengal, of the Conservator of Forests, Bengal, and also for a few months of the Commissioner of the Bhāgalpur Division; a Superintending Engineer, Executive Engineer, and Deputy-Conservator of Forests are also stationed here. It occupies a long narrow ridge descending abruptly to the bed of the Great Rangīt river. The highest and lowest points within the limits of the town are about 7,800 feet and 6,000 feet respectively above the sea. In 1872, before the construction of the railway, the population numbered only 3,157; but during the next nine years it increased by more than 100 per cent., and it doubled again between the years 1881 and 1891. Since 1891 its growth has been less rapid, as most of the available building sites have been already taken up and built upon. Moreover, the disastrous landslips of 1899 caused a temporary check to its development. These were caused by a violent cyclone with heavy rainfall, which visited the District in September, 1899. On the 23rd a heavy thunderstorm broke in Darjeeling about 1.30 p.m., and for three hours the rain descended in torrents. A lull ensued till about 8 o'clock, and then the cyclone burst in all its fury. The storm raged the whole of the night of the 23rd, and all the next day and night, without the slightest intermission till about 3.30 in the early morning of the 25th. No less than 5·3 inches of rain fell during the 24 hours ending at 8 o'clock on the morning of the 24th, and 19·4 inches before 4 a.m. of the following day. Most of the landslips occurred on the east of the town, where the hill-side is very precipitous. These overwhelmed many houses, and roads and pathways were broken away in many places by the constant stream of mud, water, and stones down the hill-sides. Seventy-two lives were lost. The station also suffered much damage in the great earthquake of 1897, when many houses were injured and a few were entirely wrecked; three lives were lost by the fall of boulders from the hill-sides.

The local trade of Darjeeling is practically confined to supplying the wants of European inhabitants and of the tea plantations. A considerable trade is carried on by the hillmen with residents and visitors in China cups, turquoise, coral and amber ornaments, jade and agate cups and beads, prayer wheels, bells, amulets and other curiosities illustrative of Buddhist monastic life, as well as *kukris*, Bhotiā and Lepchā knives, Nepālese brass-work, &c. The Darjeeling shopkeepers deal mostly in European piece-goods, stores, glass, hardware and crockery.

The municipality was constituted in 1850, and at first coincided with the tract of 138 square miles ceded by the Sikkim Rājā; it is now restricted to the station itself, with the two cantonments of Darjeeling

and Lebong, and is governed by (Bengal) Act I of 1900. The income during the decade ending 1901-2 averaged 2·19 lakhs, and the expenditure 1·72 lakhs. In 1903-4 the income was 3½ lakhs, including Rs. 48,000 from a tax on houses and lands, Rs. 19,000 from a water rate, Rs. 29,000 from a lighting rate, Rs. 23,000 from a conservancy rate, Rs. 42,000 as ground rents from leases of Government property within the town, and Rs. 9,000 as fees from the municipal market. In the same year the expenditure was 2⅔ lakhs, the chief items being Rs. 27,000 spent on lighting, Rs. 98,000 on water-supply, Rs. 47,000 on conservancy, Rs. 10,000 on medical relief, Rs. 14,000 on roads, Rs. 4,000 on buildings, Rs. 5,000 on drainage, and Rs. 1,000 on education. A loan of 16·5 lakhs has been obtained from Government for the improvement of the water-supply. An electric light installation was introduced in 1897, at a cost of 1·31 lakhs, which supplies the streets and some of the houses; an additional grant of Rs. 10,000 was made from Provincial funds in 1903-4 towards the improvement of the installation.

The chief public buildings are the Shrubbery, the residence of the Lieutenant-Governor of Bengal, built in 1879; the Secretariat offices, built in 1898; the Eden Sanitarium, the Lowis Jubilee Sanitarium, St. Andrew's Church, the Wesleyan Chapel, the Scottish Kirk, the Roman Catholic Convent and Chapel, St. Paul's School, St. Joseph's College, and the barracks at Katāpahār, Jālāpahār, and Lebong. Two gardens, Lloyd's Botanical Gardens and the Victoria Pleasaunce, are open to the public.

The Darjeeling cantonment, which is above the town, comprises JĀLĀPAHĀR and Katāpahār. At Katāpahār are artillery barracks, which at present accommodate a battery of field artillery and a company of garrison artillery during the summer. Jālāpahār is a convalescent dépôt with accommodation for 400 men. The LEBONG cantonment below Darjeeling is occupied by a British infantry regiment. The headquarters of the Northern Bengal Mounted Rifles are at Darjeeling; the force consists of 6 companies, stationed at Kurseong, Jalpaigurī, Dām-Dim, Nāgrakot, Alīpur-Duārs, and Purnea, 3 companies of cadets, and one reserve company. Its total strength (1903-4) is 510 of all ranks.

The District jail at Darjeeling has accommodation for 132 prisoners. The bakery, from which bread is supplied to the troops and to the general public, constitutes the chief industry; oil-pressing, bamboo and cane work, carpentry, boot- and shoemaking are also carried on, and bees are hived.

The chief educational institutions are St. Paul's School for the sons of Europeans and East Indians, established at Calcutta in 1845 and removed to Darjeeling in 1864; and St. Joseph's Roman Catholic

College, founded at Sunny Bank in 1888 but transferred to the present buildings at North Point in 1892. In 1903-4 there were 213 pupils at St. Joseph's College and 96 at St. Paul's School. Other schools for European and Eurasian education are the Diocesan girls' school with 85 pupils, and the Loretto Convent school with 170 pupils. New buildings have recently been erected for the Diocesan girls' school which accommodate 100 pupils; the present constitution of the school in its relation to the Clewer Sisterhood dates from 1895. The Darjeeling high school is open to all natives; the students numbered 280 in 1901, of whom 49 were Bhotiās and 3 Lepchās. Bhotiās and Lepchās who do not intend to read for university examinations are educated free, and are trained chiefly as explorers, interpreters, and surveyors. Attached to the school is a boarding-house, with accommodation for 7 Bhotiās and Lepchās.

The most important medical institution is the Eden Jubilee Sanitarium, which was opened in 1883 and provides accommodation for 86 sick and convalescent persons; it is self-supporting. A new hospital in connexion with it, built at a cost of Rs. 20,000 and opened in 1901, contains an excellent operating theatre of the most modern type and provides accommodation for six in-patients and two nurses. The Lowis Jubilee Sanitarium for natives, which was opened in 1887, contains accommodation for 99 persons; the main building and the land were given by the Mahārājā of Cooch Behār. The town also contains a dispensary with 38 beds.

Darkoti.—One of the Simla Hill States, Punjab, situated in 31° 7′ N. and 77° 38′ E., with an area of 8 square miles. The population (1901) is 518, and the revenue Rs. 800. The present chief, Rānā Rām Sarn Singh, born in 1843, succeeded in 1883.

Darod.—Petty State in KĀTHIĀWĀR, Bombay.

Darrang.—District of Eastern Bengal and Assam, lying between 26° 12′ and 27° 0′ N. and 91° 42′ and 93° 47′ E., with an area of 3,418 square miles. It is bounded on the north by Bhutān, Towang, a province subject to Tibet, and the Akā and Daflā Hills; on the east by Lakhimpur District; on the west by Kāmrūp; and on the south by the Brahmaputra. Darrang consists of a narrow strip of land shut in between the lower ranges of the Himālayas and the Brahmaputra, about 126 miles in length from east to west, with an average width of 27 miles. The only hills within the District are a few low *tīlas* between 100 and 200 feet in height along the river's edge near Singrāmāri and Tezpur, and an outlying spur of the Himālayas north of Bālipāra, round which the Bhareli sweeps in a broad curve before turning south to join the Brahmaputra. The rest of Darrang is a level plain, through which numerous rivers make their way to the Brahmaputra. The central portion of this plain

Physical aspects.

is well adapted for rice cultivation, but towards the north the level rises, and the foot of the hills is clothed in forest, while in many places the banks of the Brahmaputra are covered with high grass jungle. The District, as a whole, is very sparsely peopled; and though in places there are considerable stretches of cultivated land, a large area is waste, covered with high grass, reeds, and tree forest, and in the north with short springy turf. The general appearance is extremely picturesque. On the north the Himālayas rise like a wall from the valley, and in the cold season snowy peaks are to be seen behind the blue ranges of the outer hills. Along the southern boundary flows the mighty Brahmaputra, and across the river hills again meet the eye. The rivers issue from the mountains through gorges of great beauty, and the even level of the plain is pleasingly diversified with green rice-fields, dotted with groves of fruit trees and clumps of bamboos, trim tea gardens, and stretches of grass jungle or tree forest. The most important tributaries of the Brahmaputra from west to east are the BARNADĪ, with its tributary the Nanai, the Nanadi, the DHANSIRI, the Pāchnai, the Belsiri, the BHARELI, the Bargāng, and the Burai. All of these rivers rise beyond the frontier, and have tortuous courses and swift currents. Near the banks of the Brahmaputra there are numerous swamps and marshes, but no lakes of any size.

The plain is of alluvial origin, and consists of an admixture of clay and sand, the latter preponderating near the Brahmaputra. At Bishnāth and near Tezpur are elevated tracts which represent an older alluvium of heavier texture and higher colour. The hills are for the most part composed of gneiss.

When not under cultivation, the low-lying tracts are covered with a dense jungle of high grass and reeds, of which there are three main varieties, *khagari* (*Saccharum spontaneum*), *ikra* (*Saccharum arundinaceum*), and *nal* (*Phragmites Roxburghii*). On higher ground thatching-grass (*Imperata arundinacea*) is found.

The wild animals include elephants, rhinoceros, buffalo, bison, tigers, leopards, bears, and various kinds of deer; but the larger forms of game are being gradually killed out. In 1904, 16 persons and 3,899 cattle were killed by wild beasts, and rewards were paid for the destruction of 115 tigers and leopards. In 1902–3, 46 elephants were captured. The game-birds include florican, partridge, pheasant, jungle-fowl, and snipe.

The climate does not differ materially from that of the rest of the Assam Valley. Between November and the middle of March it is cool and pleasant, but during the remainder of the year it is warm and damp. The thermometer seldom rises above 90°, but in the rainy season the air is overcharged with moisture and is thus oppressive. The plains at the foot of the hills are exceedingly

malarious, and the District as a whole is not as healthy as those of Upper Assam.

The rainfall, as in other parts of the Province, is heavy. Near the Brahmaputra about 70 inches are recorded in the year, but under the hills the average fall is about 100 inches. The distribution as a rule is satisfactory, and the District suffers little from either drought or flood. The great earthquake of 1897 was distinctly felt in Darrang. The eastern wall of the church and the northern wall of the jail at Tezpur were shaken down, and in Mangaldai the subdivisional officer's house was wrecked, and much damage done to roads and bridges.

History.

According to tradition Darrang originally formed part of the kingdom of Bāna Rājā, who was defeated by Krishna in a pitched battle near TEZPUR ('the town of blood'). His fortress is said to have occupied the site where the Deputy-Commissioner's office now stands, and the massive granite ruins found in the neighbourhood are evidence that the town must at one time have been the seat of powerful and civilized princes, who were probably a line of Pāl kings flourishing about A.D. 1000. At Bhālukpāng, in the gorge of the Bhareli, 30 miles north of Tezpur, are the ruins of a fort, which is said to have been the capital of Bāna's grandson, Bhāluka, from whom the Akās trace their descent. In historical times Darrang formed part of the territory of Nar Nārāyan, the Koch king of Kāmarūpa, a powerful prince who flourished in the latter half of the sixteenth century. Before his death he divided his kingdom and made over Darrang, with Kāmrūp and Goālpāra, to his nephew Raghu Rai, whose capital was at Barnagar in the west of Kāmrūp District. During the reigns of Raghu Rai's two sons, Parīkshit and Bali Nārāyan, the kingdom was invaded by the Muhammadans; and though Bali Nārāyan invoked the aid of the Ahoms from Upper Assam, and was by them established as Rājā of part of the Darrang District, he was eventually defeated and killed in 1637. For at least a hundred years earlier the Ahoms had been in possession of the country east of the Bhareli, and from this time onward they were the dominant power in the whole of the District. It is doubtful whether the Koch princes ever exercised sovereign rights over the part of Darrang that lies east of Tezpur; and after the death of Bali Nārāyan the Darrang Rājās sank into the position of feudatory chiefs. Their power steadily declined, and by 1725 their territory consisted only of that portion of the Mangaldai subdivision which lay south of the Gohain Kamala Alī. Sixty years later the Ahom kingdom was tottering to its fall, and the Darrang Rājā endeavoured to throw off its yoke and to seize part of Kāmrūp; but in 1792 he was defeated by an expeditionary force under the command of Captain Welsh, and in 1826 Darrang, with the rest of Assam, passed under British control. As the hold of the Ahoms weakened, the Bhotiās, Akās, and Daflās

took the opportunity of establishing some claim to the territory lying at the foot of the Himālayas. Under native rule the two Duārs of Kaling and Buriguma, in the west of Darrang, were leased to the Bhotiās for eight months in the year. This arrangement was the source of constant trouble, and in 1841 Government attached the whole of this territory, compensating the Bhotiās for their claims with an annual money payment. Similar arrangements were made with the Bhotiās not subject to Bhutān, who put forward claims to the Kariāpāra Duār and the Char Duār, but more trouble was experienced with the Akās and Daflās who occupy the hills east of the river Dhansiri. Leaving aside the raids of frontier tribes, the most noticeable event that has occurred of recent years was a riot at Pātharughāt in February, 1894. The villagers attempted to resist the revision of the land revenue assessment, and assembled in large numbers to coerce the Deputy-Commissioner. The police were compelled to fire in self-defence, and 15 of the rioters were killed and 37 wounded.

Apart from the carved stones and pillars found at TEZPUR and the ruins of a large stone temple on a neighbouring hill, the District contains few objects of archaeological interest. Near Bishnāth, however, remains of extensive earthworks are seen, which must once have enclosed a considerable town, and large tanks are to be found near the roads made by the native princes.

Population.

The population of the District at the last four enumerations was: (1872) 235,720, (1881) 273,012, (1891) 307,440, and (1901) 337,313. The whole of the increase since 1881 has been due to immigration, for the number of persons born and enumerated in the District in 1901 was nearly 6 per cent. less than it had been twenty years before. Darrang is divided into two subdivisions, TEZPUR and MANGALDAI, with head-quarters at the towns of the same names. The Tezpur subdivision is sparsely peopled, healthy, and progressive, and contains a large number of tea gardens. Mangaldai, on the other hand, had a fairly dense population twenty years ago, which has steadily declined since 1891, owing to excessive mortality from *kalā azār*. In 1901 the District contained one town, TEZPUR, and 1,275 villages.

The table on the next page gives statistics of population according to the Census of 1901.

About 71 per cent. of the population are Hindus, 23 per cent. animistic tribesmen, and 5 per cent. Muhammadans. The foreign element in the population is very large, and no less than one-fourth of the persons enumerated in Darrang in 1901 had been born in other Provinces. The majority of these persons are garden coolies, many of whom settle down as cultivators on the expiry of their agreements, and now form an important element in the village population of the Tezpur

subdivision. Assamese was in consequence spoken by only 51 per cent. of the population, and Bodo by 16 per cent., while Bengali was returned by 19 per cent., and 6 per cent. used Hindī and Mundārī.

Subdivision.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Mangaldai . .	1,245	...	783	170,580	137	− 9·2	3,119
Tezpur . .	2,173	1	492	166,733	77	+ 39·5	6,432
District total	3,418	1	1,275	337,313	99	+ 9·7	9,551

Among Hindus the caste most strongly represented is the Koch (47,400), whose ranks are largely recruited from converted Kāchāris. The higher castes include Brāhmans (6,400), Ganaks (6,200), Kalitās (17,800), and Kewats (13,600). There are many foreign cooly castes, the most numerous being Mundās (14,100) and Santāls (11,200). The principal aboriginal tribes are the Kāchāris (63,200), with their kinsmen the Rabhās (15,400). Members of European and allied races numbered 203 in 1901. Agriculture was the means of support of 92 per cent. of the population, a very high proportion even for Assam.

A clergyman belonging to the Church Missionary Society has for many years been labouring among the Kāchāris in the north of the District, and most of the native Christians (1,128) are members of the Anglican communion.

Agriculture.

The soil varies from sand to a stiff clay, but for the cultivation of rice the rainfall and level of the land are more important factors than the actual composition of the soil on which it is grown. Summer rice and mustard are raised on the *chaparis* near the Brahmaputra in Mangaldai, but in the neighbourhood of Tezpur and Bishnāth the fringe of permanent cultivation reaches to the river, and the proportion of land under these two crops is small. The central part of Mangaldai and the strip of land between the Gābharu and the Bhareli, north of Tezpur, are for the most part covered with winter rice, which is also grown largely in the submontane tracts in the north-west. Most of the tea gardens are situated on the broad ridge known as the 'high bank,' which runs north from Tezpur towards the foot of the hills.

The table on the next page shows the distribution of the total area of the District under its principal heads in 1903–4.

Rice is the staple crop, covering 331 square miles, or 68 per cent. of the total cropped area. The total value of the rice crop is, however, considerably less than that of the tea manufactured in the District. Nearly four-fifths of the rice land is usually under *sāli* or transplanted

winter rice, and nearly the whole of the remainder is *āhu* or summer rice, which is either sown broadcast on the *chaparis* or grown as a transplanted crop in the high irrigated land under the Himālayas.

Subdivision.	Area in square miles shown in revenue accounts.			Forest area in square miles.
	Settled.	Unsettled.	Cultivated.	
Mangaldai . .	339	906	232	27
Tezpur . . .	336	1,837	227	294
Total	675	2,743	459	321

The tea industry has made great strides during the last twenty years, and has been one of the most important factors in the development of the District. In 1882 the area planted was only 14,300 acres, but by 1896 it had risen to 31,900 acres. The industry was at that time in a very prosperous condition, private owners took advantage of the opportunity to sell their property to companies, and the capital thus obtained was used to extend the area under cultivation, which three years later amounted to 41,500 acres. It was impossible for the demand to keep pace with so rapid an expansion of the supply; prices fell, it was no longer found profitable to spend money and labour on old tea gardens, and by 1904 the area had fallen to 39,941 acres. There were in that year 87 gardens, yielding an out-turn of nearly 16,000,000 lb. of manufactured tea and giving employment to 99 Europeans and 52,085 natives, nearly all of whom had been brought at great expense from other parts of India. The principal companies are the Empire of India Company, with its centre at Barjuli, and the Bishnāth Company, with its centre at Pratāpgarh.

Between 1891 and 1901 the area settled at full rates rose by 7 per cent., but the whole of this increase occurred in the Tezpur subdivision, and the decrease of population in Mangaldai was accompanied by a shrinkage in the cultivated area. Some attempt has been made at scientific farming by Europeans and Bengalis, and cotton, jute, and various kinds of sugar-cane and rice have been introduced, but the natives as a whole show little inclination to adopt new varieties or to improve the quality of the crops grown. No advances under the Agriculturists' Loans Act have yet been made in the District.

In spite of an abundance of good grazing, the Assamese cattle, as in other parts of the Brahmaputra Valley, are miserable creatures, but the native breed of buffaloes are fine specimens of their kind. The Bhotiās bring down sturdy little ponies, sheep, and fine cattle. Sheep do not thrive in the plains, and are hardly ever reared there, while the ponies bred in the District are very inferior.

Irrigation is practised only in the submontane tracts, where the

Kāchāris divert water from the hill streams to their fields through little channels, and thus raise magnificent crops of rice from somewhat inferior soil. In the central portion of the plain the abundant rainfall and the low level of the land render irrigation unnecessary.

Forests, etc.

Most of the 'reserved' forests of Darrang lie at the foot of the hills that form the northern boundary, stretching east and west from the Bhareli river at the point where it debouches on the plains. The total area of the Reserves, of which there are 7, is 321 square miles, the largest being the Charduār (121 square miles), the Bālipāra (88 square miles), and the Nowduār (82 square miles). The most valuable trees are rubber (*Ficus elastica*), which has, however, been largely killed out by over-tapping, *sāl* (*Shorea robusta*), *nahor* (*Mesua ferrea*), *khair* (*Acacia Catechu*), *gunserai* (*Cinnamomum glanduliferum*), and *sam* (*Artocarpus Chaplasha*). Canoes are made from the *hollock* (*Terminalia bicolorata*), and *simul* (*Bombax malabaricum*) is used for tea boxes. The needs of the people are fully met from the 'unclassed' state forest, managed by the local revenue authorities, which in 1903-4 covered an area of 2,126 square miles; very little timber is extracted from the Reserves. The greater portion of the 'unclassed' state forest is, however, rolling savannah or marsh land, almost entirely destitute of tree growth. A considerable trade has always been carried on in rubber, which was formerly obtained in large quantities in British territory, but now comes chiefly from across the frontier. The receipts on this account during the ten years ending with 1900-1 averaged Rs. 21,000 per annum. In 1873 a plantation of rubber trees was started by Government at CHARDUĀR, which in 1903-4 covered 2,900 acres. A small trade has recently sprung up in *agar* wood, which is used for the manufacture of a perfume much in favour in the East.

No minerals are worked in Darrang, but good building stone can be obtained from the hills near Tezpur town. Under native rule gold-washing was carried on in many of the rivers, but the industry has completely died out since the occupation of the country by the British. Limestone of an inferior quality is found in the west of the District, and travertine, containing as much as 90 per cent. of lime, has been discovered just beyond the frontier. Coal is known to exist outside the northern boundary, but not, it is believed, in valuable quantities or of good quality.

Trade and communications.

The manufactures of Darrang are of very little importance. A few persons cast or hammer bell-metal and brass vessels; simple ornaments of gold, silver, and lacquer are made, but only to order; and a certain amount of rough pottery is turned out; but the number of persons supported by these crafts is small. Weaving is carried on in almost every house, but the greater

part of the produce is required for home consumption, and the surplus available for sale is not large. A saw-mill afforded employment in 1904 to one European and 55 natives.

As in the rest of the Assam Valley, almost the whole of the trade is in the hands of the wealthy and indefatigable Mārwāri merchants, whose shops are to be found even in the remotest portions of the District, but at Mangaldai and Tezpur a few shops are kept by Muhammadans from Bengal. A great deal of business is also done at the markets which are held every week in the neighbourhood of the tea gardens, and attended by villagers from many miles round. The principal centres are TEZPUR, Bindukuri, BĀLIPĀRA, and Barjuli, all of which are served by the Tezpur-Bālipāra Railway. East of the Bhareli there is a fairly large market at Chutiā, and in Mangaldai the largest bazars are those at Mangaldai town, Paneri, and Kalaigaon. External trade is carried on almost entirely with Calcutta, and enters and leaves the District by steamer. The principal exports are tea, rubber, mustard seed, hides, and canes, while the articles received in exchange are rice, gram, and other grains, kerosene and other oils, piece-goods, machinery, hardware, and salt. Trans-frontier trade, which is largely transacted by barter, is carried on with the Bhotiās of Bhutān at Ghāgrāpāra and with those of Towang at UDALGURI. Rubber is also imported from the Akā and Daflā Hills. The principal imports are rubber, blankets, and hill ponies; the chief exports, cotton twist and piece-goods, rice, and silk cloths. Salt used formerly to be imported across the frontier in considerable quantities, but has of late years been ousted by the cheaper and better article obtained from Bengal.

The main channel of trade is the Brahmaputra, on which a daily service of passenger boats and a large fleet of cargo steamers, owned by the India General Steam Navigation Company and the Rivers Steam Navigation Company, ply between Goalundo and Dibrugarh and call at Tezpur and five other places in Darrang District. Country boats do not often pass up the Brahmaputra much above Mangaldai, and the rivers flowing from the Himālayas are little used as trade routes. The trunk road runs from west to east through the District, a distance of 144 miles, but carries traffic only in a few places, as the direction of trade is southwards to the great river. There is no dearth of roads, but heavy traffic from the tea gardens renders some of those leading to the river *ghāts* almost impassable in the rains. The cost of metalling is prohibitive, and the inconvenience experienced near Tezpur was so great that a 2 feet 6 inches railway was constructed in 1895 with private capital. This line runs from Tezpur *ghāt* through some of the most important gardens, for a distance of twenty miles, to Bālipāra. In 1903-4, 165 miles of unmetalled road were maintained by the Public Works department and 420 miles of unmetalled road by local boards.

Most of the minor streams are bridged, but ferries have still to be worked over the larger rivers.

Administration.

For general administrative purposes the District is divided into two subdivisions—TEZPUR, which is under the immediate charge of the Deputy-Commissioner; and MANGALDAI, which is usually entrusted to a European magistrate. In addition to the Deputy-Commissioner, the ordinary staff of the District includes three Assistant Magistrates, one of whom is in charge of the Mangaldai subdivision, an Engineer, who is also in charge of Nowgong District, and a Forest officer.

The Deputy-Commissioner exercises the powers of a Sub-Judge and the Assistant Magistrates act as Munsifs. Appeals, both civil and criminal, lie to the Judge of the Assam Valley, but the chief appellate authority is the High Court at Calcutta. The people are, as a whole, law-abiding, and there is not much serious crime.

The land revenue system does not differ materially from that in force in the rest of Assam proper, which is described in the article on ASSAM. The settlement is *ryotwāri*, being made direct with the actual cultivators of the soil, and is liable to periodical revision. The District contains a large area of waste land, much of which is fit for permanent cultivation; but the settled area of 1903–4 was only one-fifth of the total area, including rivers, swamps, and hills. Mustard and summer rice are seldom grown on the same land for more than three years in succession, and the villagers are allowed to resign their holdings and take up new plots of land on giving notice to the revenue authorities. In 1903–4, 17,000 acres of land were so resigned and more than 26,000 acres of new land taken up. Fresh leases are issued every year for this shifting cultivation, and a large staff of *mandals* is maintained to measure new land, test applications for relinquishment, and keep the records up to date. The District was last resettled for ten years in 1893, and the average assessment per settled acre assessed at full rates in 1903–4 was Rs. 2–8–3 (maximum Rs. 4–2 and minimum Rs. 1–11). Of recent years the condition of the people in Mangaldai has been prejudicially affected by the heavy mortality due to *kalā azār*, and by the great earthquake which disturbed the level of the country. In 1901, as a measure of relief, the land revenue demand in that subdivision was reduced by Rs. 20,000.

The land revenue and total revenue of the District, in thousands of rupees, are shown in the following table:—

	1880–1.	1890–1.	1900–1.	1903–4.
Revenue from land.	4,37	4,85	7,01	6,96
Total revenue.	9,31 *	10,11	13,48	12,92

* Exclusive of forest receipts

Outside the municipality of TEZPUR, the local affairs of each subdivision are managed by a board presided over by the Deputy-Commissioner and subdivisional officer respectively. The presence of a strong European element on these boards, elected by the planting community, lends to them a considerable degree of vitality. The total expenditure in 1903–4 amounted to Rs. 1,03,000, nearly two-thirds of which was laid out on public works. The income is chiefly derived from local rates, supplemented by a substantial grant from Provincial revenues.

For the purposes of prevention and detection of crime, the District is divided into eight investigating centres, and the civil police force consisted in 1904 of 32 officers and 201 men. There are no rural police, their duties being discharged by the village headmen. During the winter 3 officers and 126 non-commissioned officers and men of the Lakhimpur military police battalion are stationed in Darrang, to hold the four outposts of UDALGURI, Ghāgrāpāra, Daimārā, and Dikal, with a reserve at Tezpur. In the rains, when the hillmen cannot easily reach the plains, the outposts are withdrawn, and only the Tezpur garrison of 34 rifles remains. In addition to the District jail at Tezpur, there is a subsidiary jail at Mangaldai, with accommodation for 35 males and 4 females.

Education has not made much progress in Darrang. Between 1874–5 and 1903–4 the number of scholars increased by 103 per cent., as compared with 223 per cent. in all the plains Districts of Assam taken together. The number of pupils under instruction in 1880–1, 1890–1, 1900–1, and 1903–4 were 3,165, 3,593, 4,763, and 4,550 respectively. At the Census of 1901, 2·8 per cent. of the population (5·2 males and 0·3 females) were returned as literate. This low rate is partly due to the fact that animistic tribes and garden coolies form an unusually large proportion of the total population. There were 139 primary, 5 secondary, and 2 special schools in the District in 1903–4. The number of female scholars was 145. A large majority of the pupils under instruction were only in primary classes, and not a single girl had advanced beyond that stage. Of the male population of school-going age, 14 per cent. were in the primary stage of instruction, and of the female population of the same age less than one per cent. The total expenditure on education in 1903–4 was Rs. 47,000, of which Rs. 7,000 was derived from fees; 31 per cent. of the direct expenditure was devoted to primary schools.

The District possesses 2 hospitals and 8 dispensaries, with accommodation for 52 in-patients. In 1904 the number of cases treated was 107,000, of whom 400 were in-patients, and 1,000 operations were performed. The expenditure in the same year was Rs. 15,000, the greater part of which was met from Local and municipal funds.

The advantages of vaccination are not fully appreciated, and in 1903–4 only 35 per 1,000 of the population were successfully vaccinated, which is considerably below the proportion for the Province as a whole.

[E. A. Gait, 'The Koch Kings of Kāmarūpa,' *Journal of the Asiatic Society of Bengal*, vol. lxii, p. 4; Sir W. W. Hunter, *A Statistical Account of Assam*, vol. i (1879); A. Mackenzie, *History of the Relations of the Government with the Hill Tribes of the North-East Frontier of Bengal* (Calcutta, 1884); B. C. Allen, *District Gazetteer of Darrang* (1906).]

Darsi.—*Zamīndāri tahsīl* in the north of Nellore District, Madras, lying between 15° 33′ and 16° 1′ N. and 79° 19′ and 79° 58′ E., with an area of 616 square miles. The population in 1901 was 82,459, compared with 84,631 in 1891. The number of villages is 118, of which Darsi is the head-quarters. The *tahsīl* is a part of the VENKATAGIRI ESTATE. The aspect of the country is remarkably bare and barren. Trees are few, and the monotony is broken only by occasional stony hills. There is little irrigation, the chief food-grains being 'dry crops' such as *cholam*, *korra*, *variga*, *aruga*, *cambu*, and *rāgi*. Two rivers, the Gundlakamma and the Mūsi, flow through a portion of it. The climate is very hot, and there is usually a scarcity of water in the dry season.

Dārwhā Tāluk.—*Tāluk* of Yeotmāl District (formerly known as Wūn), Berār, lying between 19° 52′ and 20° 36′ N. and 77° 34′ and 78° 11′ E., with an area of 1,062 square miles. The population rose from 156,580 in 1891 to 156,679 in 1901, its density in the latter year being 148 persons per square mile, the highest in the District. The *tāluk* contains 327 villages and 2 towns, DĀRWHĀ (population, 5,168), the head-quarters, and DIGRAS (6,034). The demand for land revenue in 1903–4 was Rs. 2,91,000, and for cesses Rs. 21,000. The *tāluk* lies in the Bālāghāt, or southern plateau of Berār, but is well watered by streams flowing southward to the Penganga, which bounds it on the south; and it is generally more fertile than other *tāluks* lying in this tract.

Dārwhā Town.—Head-quarters of the *tāluk* of the same name, in Yeotmāl District, Berār, situated in 20° 19′ N. and 77° 49′ E. Population (1901), 5,168. It was formerly the residence of Sābhājī Muslājī Bhonsla. A metalled road runs to Yeotmāl, 24 miles distant. The town contains a *tahsīl* courthouse and schools.

Daryābād.—Town in the Rāmsanehīghāt *tahsīl* of Bāra Bankī District, United Provinces, situated in 26° 53′ N. and 81° 34′ E., close to the Oudh and Rohilkhand Railway. Population (1901), 5,928. It is said to have been founded in the fifteenth century by an officer of Muhammad Shāh of Jaunpur. At annexation it was selected as the head-quarters of the District, but on account of its unhealthiness the offices and courts were moved to Bāra Bankī town. Daryābād

contains a dispensary, and a school with 156 pupils. It is administered under Act XX of 1856, with an income of about Rs. 1,300.

Daryāpur.—*Tāluk* of Amraotī District, Berār, lying between 20° 49′ and 21° 20′ N. and 77° 11′ and 77° 38′ E., with an area of 505 square miles. The population fell from 122,552 in 1891 to 113,698 in 1901. The density is 227 persons per square mile. The *tāluk* contains 244 villages and one town, ANJANGAON (population, 8,783), the population of Daryāpur, the head-quarters of the *tāluk*, being only 4,389. The demand for land revenue in 1903–4 was Rs. 6,11,000, and for cesses Rs. 48,000. The *tāluk* lies in the fertile Pāyānghāt valley, being bounded on the north by the Gāwīlgarh hills, and is well watered by streams running southwards from those hills into the Pūrna. Daryāpur was formerly a *tāluk* of Ellichpur, but was, with the rest of that District, incorporated in Amraotī District in August, 1905.

Dasāda.—Petty State in KĀTHIĀWĀR, Bombay.

Dasara.—Head-quarters of the Mānikganj subdivision of Dacca District, Eastern Bengal and Assam, situated in 23° 53′ N. and 90° 2′ E., on the west bank of the Dhaleswarī river. Population (1901), 1,548 It is a large mart, the bazar extending over 2 square miles. It possesses the usual public offices; the sub-jail has accommodation for 22 prisoners.

Dasht.—River in Baluchistān, draining the south-west part of Makrān, and formed by the junction of the Nihing and the Kech Kaur at Kaur-e-Awārān. The Kech Kaur, in its turn, is formed by the two streams, the Gish Kaur draining the Buleda valley, and the Kīl or Kūl Kaur which rises in the Central Makrān Range. From the source of the Kīl Kaur to the sea the course is 255 miles. The Nihing waters Mand and Tump, and the Kech Kaur waters Buleda, Sāmi, and Kech. The united streams then fertilize the Dasht valley, and fall into the sea by a creek which is tidal for 12 or 15 miles (25° 12′ N. and 61° 38′ E.). Irrigation is chiefly from flood-water or from pools in the bed. Much diluvion is caused by the floods of the Kech Kaur in Kech and Sāmi.

Daska Tahsīl.—Eastern *tahsīl* of Siālkot District, Punjab, lying between 32° 1′ and 32° 37′ N. and 74° 16′ and 74° 32′ E., with an area of 359 square miles. It is bounded on the north by the Chenāb. The population in 1901 was 206,148, compared with 207,465 in 1891. The head-quarters are at the town of DASKA (population, 6,655), and it also contains the town of JĀMKI (4,216) and 332 villages. The land revenue and cesses amounted in 1903–4 to Rs. 3,56,000. Daska, the most fertile of all the *tahsīls* of Siālkot District, consists of an almost unbroken plain, with abundant facilities for well-irrigation. The Aik torrent, which passes through the *tahsīl*, deposits a rich silt.

Daska Town.—Head-quarters of the *tahsīl* of the same name in Siālkot District, Punjab, situated in 32° 19′ N. and 74° 21′ E. Popula-

tion (1901), 6,655. The two villages of Daska and Kot Daska are said to take their name from being 10 *kos* (*das kos*) from Siālkot, Pasrūr, Gujrānwāla, and Wazīrābād. The town boasts of a considerable manufacture of brass vessels, and has a branch of the Mission of the Established Church of Scotland, which maintains an Anglo-vernacular middle school and a training institution for teachers. It also has an Anglo-vernacular middle school maintained by the District board. The Daska-*cum*-Kot Daska municipality was created in 1867. The income during the ten years ending 1902-3 averaged Rs. 5,500, and the expenditure Rs. 5,400. In 1903-4 the income was Rs. 6,100, chiefly derived from octroi; and the expenditure was Rs. 5,500.

Daskroi Tāluka.—Head-quarters *tāluka* of Ahmadābād District, Bombay, lying between 22° 48′ and 23° 15′ N. and 72° 28′ and 72° 50′ E., with an area of 345 square miles. The population in 1901 was 314,719, compared with 295,987 in 1891. The *tāluka* contains one town, AHMADĀBĀD (population, 185,889), its head-quarters; and 137 villages. Owing to the presence of the city, the density of population, 912 persons per square mile, is much higher than elsewhere. Land revenue and cesses amounted in 1903-4 to nearly 4·4 lakhs. The entire *tāluka*, except for a few gentle undulations in the east and south, is a uniform plain. It is crossed by the Sābarmatī, Khāri, and Meshvar rivers, but only in the extreme south are their waters used for irrigation. The soil is light, and varies from dry sand to rich loam. With good tillage and watering, the sandiest fields yield a large return to the husbandman. In the loops of land enclosed by the Sābarmatī, patches of alluvial soil produce the finest sugar-cane and tobacco. The climate is hot and dry, and the rainfall averages 28 inches.

Daspallā.—One of the Tributary States of Orissa, Bengal, lying between 20° 11′ and 20° 35′ N. and 84° 29′ and 85° 7′ E., with an area of 568 square miles. It is bounded on the north by Angul District and the State of Narsinghpur, from the latter of which it is separated by the Mahānadī river; on the east by Khandparā and Nayāgarh; on the south by the Madras District of Ganjām; and on the west by Baud. Daspallā, especially on the west and south, is covered with hills containing much timber. The principal peak is Goāldes (2,506 feet). The Mahānadī river, flowing through the picturesque Barmūl gorge in the north-west corner of the State, constitutes an excellent waterway. Daspallā is said to have been founded about 500 years ago by a son of the Rājā of Baud, and consisted originally of two small grants made by the Rājās of Nayāgarh and Khandparā; it was subsequently extended by the gradual absorption of neighbouring Khond villages. It is divided into two parts: Daspallā proper, lying south of the Mahānadī, the original principality; and Joremuha, a small tract north of the Mahānadī, which was an acquisition from Angul.

The chief is commonly known as the Rājā of Joremuha Daspallā. No tribute is paid for Joremuha, by virtue of a concession granted by the Marāthās in consideration of the Rājā supplying, free of all cost, all the timber annually required for the Jagannāth cars at Purī. At the Barmūl gorge the Marāthās made their unsuccessful stand against the British in 1804. The State has an estimated revenue of Rs. 70,000, and pays a tribute of Rs. 661 to the British Government. The population increased from 45,597 in 1891 to 51,987 in 1901, of whom 51,903 were Hindus, the most numerous castes being Khonds (12,000), Pāns (8,000), Chāsas (7,000), and Gaurs (5,000). The density is 92 persons per square mile. The number of villages is 485, of which the chief is Kunjaban, the head-quarters of the State, situated 14 miles from the Cuttack-Sonpur road. The State maintains a charitable dispensary, a middle English school, 2 upper primary, and 30 lower primary schools.

Dasūya Tahsīl.—*Tahsīl* of Hoshiārpur District, Punjab, lying between 31° 35′ and 32° 5′ N. and 75° 30′ and 75° 59′ E., with an area of 501 square miles. The population in 1901 was 239,004, compared with 244,346 in 1891. It contains the towns of DASŪYA (population, 6,404), the head-quarters, MUKERIĀN (3,589), MIĀNI (6,118), and TĀNDA-URMAR (10,247); and 633 villages. The land revenue and cesses amounted in 1903–4 to 4·6 lakhs. The *tahsīl* is situated in a wide bend of the Beās, which is the boundary on the north-east and west. It comprises a stretch of fertile land on the south, the lowlands along the river, a tract of higher land below the Siwāliks, and the northern extremity of the Siwāliks themselves.

Dasūya Town.—Head-quarters of the *tahsīl* of the same name in Hoshiārpur District, Punjab, situated in 31° 49′ N. and 75° 40′ E., 25 miles north-west of Hoshiārpur town. Population (1901), 6,404. Dasūya is one of the numerous places popularly identified with the capital of the Rājā Virāta of the Mahābhārata. It contains a ruined fort, mentioned in the *Ain-i-Akbarī*, which was one of the strongholds of the Rāmgarhias, and was annexed in 1817 by Ranjīt Singh. The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 2,900, and the expenditure Rs. 2,700. In 1903–4 the income was Rs. 3,700, chiefly derived from octroi; and the expenditure was Rs. 2,900. It maintains a vernacular middle school and a Government dispensary.

Dātāganj.—Easternmost *tahsīl* of Budaun District, United Provinces, comprising the *parganas* of Salempur and Usehat, and lying between 27° 40′ and 28° 11′ N. and 79° 6′ and 79° 31′ E., with an area of 418 square miles. Population increased from 196,083 in 1891 to 215,186 in 1901. There are 385 villages and 3 towns, the largest being ALĀPUR (population, 6,327) and KAKRĀLĀ (5,954). The demand for land revenue in 1903–4 was Rs. 2,85,000, and for cesses

Rs. 35,000. The density of population, 515 persons per square mile, is almost the same as the District average. The *tahsīl* is bounded by the Ganges on the south, and by the Rāmgangā on the east. The northern portion is crossed by the Aril, a tributary of the latter, and by many small channels, while the Sot traverses the southern portion. The natural moisture and the character of the soil are peculiarly favourable to the growth of rice, which this *tahsīl* produces largely. A considerable area in the south is watered by a system of private canals taken from the Sot, of some antiquity. As a whole the upland area is inferior to the rich Katehr tract found in other *tahsīls* of this District, while the areas bordering on the Rāmgangā and Ganges are liable to disastrous floods. In 1903-4 the area under cultivation was 311 square miles, of which 64 were irrigated. Wells supply half the irrigated area, and tanks or *jhīls* and rivers the remainder in about equal proportions.

Datāna.—*Thakurāt* in the MĀLWĀ AGENCY, Central India.

Dātha.—Petty State in KĀTHIĀWĀR, Bombay.

Datiā State.—Treaty State in Central India, under the Bundelkhand Agency, lying between 25° 34′ and 26° 18′ N. and 78° 13′ and 79° 12′ E., with an area of about 911 square miles. The territory is much cut up by intervening parts of Gwalior and other States, the main section being bordered on the north by portions of Gwalior and the District of Jālaun; on the south by Gwalior and Jhānsi District; on the east by Samthar and Jhānsi District; and on the west by Gwalior. The State lies in the level country between the Sind and Betwā rivers. The Sind and its tributary the Pahūj are the only important streams.

The country immediately round the chief town lies in the Bundelkhand gneiss area, but in the northern portion of the State this rock is overlaid with alluvium. The trees met with in the jungles are of no great value, being mostly of the mimosa family, though in more favourable localities the *mahuā* (*Bassia latifolia*) is found, its flowers of the jungles makes them unsuitable for big game, though all the being used as food and for distillation of liquor. The scanty nature ordinary classes of small game are plentiful. The climate, which is considerably hotter than that of Mālwā, is generally speaking healthy. The annual rainfall averages 38 inches.

The Datiā chiefs are Bundelā Rājputs of the ORCHHĀ house. In 1626 Bīr Singh Deo of Orchhā granted Datiā to his son Bhagwān Rao. The original territory was considerably extended both by force of arms and by grants from the Delhi emperors, till the State embraced most of the country between the Chambal on the north and the Betwā and Sind on the east and west. Bhagwān Rao died in 1656 and was succeeded by his son Subha Karan, who had served with distinction under the Mughal emperor in Balkh and Badakshān, during the

expeditions of 1646–53. In the struggle between Aurangzeb and his brothers, he joined the future emperor and died in 1683. On the death of Rām Chandra, the fourth Rājā (1706–33), a dispute about the succession was referred to Rājā Udot Singh of Orchhā, who decided in favour of Indrajīt, a great-grandson of Rām Chandra, and assisted him by arms to secure the chiefship. Among others who had given support was Naune Sāh Gūjar (*see* SAMTHAR), whose son Madan Singh received as a reward the governorship of the fort of Samthar, and the title of Rājdhar; a grant of five villages was made later on to his son, Devī Singh. The Marāthās began to invade Bundelkhand during this period. The seventh Rājā, Parīchhat, concluded a treaty with the British in 1804. In 1818, for services rendered in connexion with the pacification of the country, he obtained the territory east of the Sind river known as the Chaurāsī Ilāka, which includes the fort of Indargarh. In 1826 he adopted as his successor a foundling named Bijai Bahādur Singh, whom he had educated. This aroused much feeling among the Thākurs of Baronī, who, as direct descendants of Bhagwān Rao, considered that the adoption should have been made from their family. The adoption, however, was upheld by the British Government. Bijai Bahādur Singh succeeded in 1839, and died childless in 1857. He was followed by the present chief, Bhawānī Singh, adopted from the Bhasnai family, whose members are descended from Har Singh Deo, a brother of Rājā Bīr Singh Deo of Orchhā. Bhawānī Singh being a minor, the State was administered by the senior Rānī, and on her death by the second Rānī. Disturbances arose, however, through the pretensions of Arjun Singh, an illegitimate son of the late chief. He was supported by the regent Rānī, but was suppressed finally by a British force and exiled to Benares, the Rānī being placed in confinement at Datiā. The Baronī Thākurs again (1861) put forward their claims to the succession, which were rejected. Dissensions between the Thākurs and the ruling chief continued until 1882, when it was decided by the British Government that the Baronī *jāgīr* was a grant entirely independent of Datiā made from Delhi, and that the Mahārājā could not, therefore, claim to stand in the same relation to Baronī as to *jāgīrdārs* holding under a grant from the State, though the Thākurs must be considered as politically subordinate to Datiā. An adoption *sanad* was granted to the chief in 1862. The most important measures which have been effected during the rule of the present chief are—the salt convention with the British Government (1879), under which a yearly compensation of Rs. 10,000 is received by the Darbār; the cession of land for the Betwā Canal (1882) and for the construction of the Midland Railway (1884); and the conversion of the currency (1903). The chief has the hereditary titles of His Highness and Mahārājā Lokendra, and receives a salute of 15 guns.

The present Mahārājā was created a K.C.S.I. in 1896, and his salute was increased to 17 guns in 1906 as a personal distinction.

There are few buildings in the State of any architectural or archaeological importance, except the fine seventeenth-century palace of Bīr Singh Deo and that of Rājā Subha Karan in the chief town. A temple to the Sun at the village of Unao, 10 miles south-east of Datiā town, is of great local repute, and is visited by large numbers of worshippers at the Rangapanchamī festival held yearly in March. A circular stone image of the Sun stands inside the temple. The waters of a tank near the temple are supposed to cure leprosy and skin diseases generally.

The population of the State has been: (1881) 182,598, (1891) 186,440, and (1901) 173,759, showing a density of 191 persons per square mile. The decrease of 7 per cent. during the last decade is mainly due to the effects of the famines of 1896–7 and 1899–1900. Hindus number 166,170, or 95 per cent., and Musalmāns 7,095, or 4 per cent. The State contains three towns, DATIĀ (population, 24,071), the capital, SEONDHĀ (5,542), and NADĪGAON (4,443); and 455 villages. The prevailing language is Bundelkhandī, spoken by 98 per cent. of the population. The principal castes and tribes are Brāhmans, 24,000, or 14 per cent.; Chamārs, 19,300, or 11 per cent.; Kāchhīs, 14,300, or 8 per cent.; and Rājputs, including Bundelā and other Thākurs, 8,000, or 5 per cent. About 38 per cent. of the population are supported by agriculture, 15 per cent. by general labour, and 10 per cent. by State service.

The greater part of the soil is of poor quality, owing to the rocky nature of the gneissic formation. Irrigation, which thus becomes an important matter, is mainly carried on from tanks, formed, as a rule, by raising earthen dams in the frequent gaps which occur between the quartzite ridges so common in this region. The total area of 911 square miles is thus distributed: cultivated, 450 square miles, or 49 per cent., of which 11 square miles are irrigable; cultivable but uncultivated, 95 square miles; forests, 274 square miles, or 30 per cent.; the rest is waste. Much of the land is included in *jāgīrs* and other land grants, the alienated area comprising 31 per cent. of the total area, and 26 per cent. of the cultivated. Of the total cropped area, pulses (including gram) occupy 221 square miles, or 49 per cent.; wheat, 128 square miles, or 28 per cent.; *jowār*, 54 square miles; cotton, 26 square miles; and poppy, 78 acres.

Though a considerable area of the State is officially classed as forest, it is, strictly speaking, merely scrub jungle, including a certain amount of grass land used for grazing purposes.

The chief means of communication are country tracks, the only metalled roads being part of the Gwalior-Jhānsi high road (52 miles) and the feeder-roads to Baronī (4 miles) and Unao (10 miles). The

Midland branch of the Great Indian Peninsula Railway traverses the State, with stations at Datiā and Sonāgir. A combined British post and telegraph office is kept up at Datiā town, and a branch post office at Seondhā. A State postal system is also maintained, and there is a local issue of stamps.

The Mahārājā exercises full powers, and is the highest court of appeal in the State, the criminal, civil, revenue, and household departments being under his direct supervision. He is assisted by a *dīwān* (minister), who inquires into serious criminal cases and forwards them to the Mahārājā for trial, and also supervises the general working of all departments. The Indian Penal Code is adopted generally in the criminal courts. In civil courts the State follows its own procedure, which is based on the old *panchāyat* system.

The total revenue is 4 lakhs, of which 3·2 lakhs, or 80 per cent., is derived from land revenue. Opium, of which a small quantity is manufactured, pays a duty of Rs. 1-2-0 per seer, and together with other excisable articles brings in Rs. 6,500 a year. A yearly sum of Rs. 10,000 is received from the British Government in compensation for salt dues formerly levied. The principal heads of expenditure are 1·5 lakhs on general administration (including the chief's establishment) and Rs. 63,000 on public works. An annual payment of Rs. 9,500 is made to Sindhia for the Nadigaon *pargana*. Assignments of land to *jāgīrdārs* for the up-keep of feudal levies amount to about 5·5 lakhs, making the gross income of the State 9·5 lakhs.

Land revenue was formerly collected four times a year after valuation of the standing crop, called *dharot*. The collections were then made in kind, one-half to one-third of the gross produce going to the State. The revenue is now collected in cash, in two instalments. The rates are fixed in regard to the crop-bearing power of the soil and facilities for irrigation. Leases are granted ordinarily for one year only, rates being liable to enhancement if improvements are effected, such as the construction of dams for irrigation. Most of the villages are in the hands of farmers called *mahate*, who pay the revenue assessed and sublet to cultivators. Rents are often paid in kind. The rates of assessment vary from Rs. 4 per acre for the best black cotton soil to Rs. 1-9-6 for the less productive *parua*, a light sandy soil, the average incidence being Rs. 2-15-0.

In 1903 the British rupee was adopted in place of the various local currencies which had till then been legal tender.

The army consists of 300 infantry, 71 cavalry, and 165 artillery, with 48 serviceable guns. A small body of regular police is maintained, but in villages watch and ward is done by the village *chaukīdārs*, who are drawn from the Khangār tribe.

The State contains two jails, one at Datiā and the other at Seondhā.

The first regular school was opened at Datiā in 1858. In 1864 an English-teaching school was started, which in 1888 became a high school and now prepares pupils for the entrance examination of the Allahābād University. There are 29 schools in all, with 711 pupils, and the annual expenditure is Rs. 3,000. The State has not advanced far in education, only 2 per cent. of the population (3.8 males and 0.1 females) being able to read and write in 1901. A hospital at Datiā and a dispensary at Seondhā are maintained at an annual cost of Rs. 1,300. Revenue surveys were made in 1855 and 1865.

Datiā Town.—Capital of the State of the same name in Central India, situated in 25° 41′ N. and 78° 28′ E., on the Gwalior-Jhānsi road, 16 miles from the latter place, and also on the Midland branch of the Great Indian Peninsula Railway, 718 miles from Bombay; 980 feet above sea-level. Population (1901), 24,071. The town is built on a series of low hills, on one of which stands the magnificent palace of Bīr Singh Deo, its massive pile towering above the houses below. The palace, one of the finest examples of Hindu domestic architecture in India, is built in the form of a square. The monotony, however, is relieved by four octagonal towers, one at each corner, and string-courses of stone lattice-work marking out the five storeys. The summit is ornamented with numerous graceful *chhatris*, crowned with ribbed domes. The southern façade looks over a large lake with fine stone retaining walls. To the east of the town stands the palace of Rājā Subha Karan. Though by no means the equal of Bīr Singh's palace, it is nevertheless a handsome building, standing on an elevated site overlooking the town. The town itself contains an unusually large proportion of substantial stone-built houses, belonging chiefly to *sardārs* of the State, besides a State guesthouse, a combined post and telegraph office, a *dāk*-bungalow, a hospital, a jail, and a school. Several fine tombs and other buildings are situated in the neighbourhood, and a battlemented wall surrounds the town.

Dattāpur.—Town in the Chāndūr *tāluk* of Amraotī District, Berār, situated in 20° 47′ N. and 78° 11′ E. Population (1901), 5,187. The place is a local centre of the cotton trade, with some ginning factories and presses.

Datt's Bāzār.—Mart in the head-quarters subdivision of Mymensingh District, Eastern Bengal and Assam, situated in 24° 21′ N. and 90° 37′ E., on the old Brahmaputra, 37 miles from Nasīrābād town. Population (1901), 63. It is one of the principal marts in the south of the District, carrying on a large trade in jute with Nārāyanganj in Dacca.

Daudnagar.—Town in the Aurangābād subdivision of Gayā District, Bengal, situated in 25° 3′ N. and 84° 24′ E., on the right bank of the Son river and the left bank of the Patna canal. Population (1901),

9,744. It is said to have been founded by Daud Khān, a *risāldār* of Aurangzeb, and its chief building is a *sarai* or resthouse built by him. It is surrounded by a moat, and formerly had gates which used to be shut every night. Its trade was once very considerable, and *tasar* cloth was manufactured in large quantities. Its prosperity is on the wane, improved communications having brought the area it used to tap into close proximity to the two main centres, Patna and Gayā; but it has still some trade in *tasar* cloth, brass utensils, blankets, carpets, sesamum, linseed, and molasses. It has also a sugar refinery. It contains the offices of the Assistant Engineer and the Circle officer of the Irrigation department. Daudnagar was constituted a municipality in 1885. The income during the decade ending 1901-2 averaged Rs. 4,400, and the expenditure Rs. 4,200. In 1903-4 the income was Rs. 4,600, mainly from a tax on persons (or property tax); and the expenditure was Rs. 4,500.

Daulatābād (or Deogiri).—Hill-fort in the District and *tāluk* of Aurangābād, Hyderābād State, situated in 19° 57′ N. and 75° 13′ E. Population (1901), 1,357. The place is celebrated as the capital of the Seunas, more commonly known by their assumed name of Yādavas, who rose from the position of feudatories of the Chālukyas to that of independent princes. Bhillama I, who threw off allegiance about 1187, is said by Hemādri to have founded Deogiri. His grandson, Singhana, acquired practically the whole of the Western Chālukyan kingdom. Alā-ud-dīn Khiljī captured the fort in 1294, and this event marks the first invasion of the Deccan by the Muhammadans. The fort was restored to the Rājā on his agreeing to pay tribute, but later expeditions were undertaken on account of default; and Deogiri was occupied by Malik Kāfūr in 1307 and 1310, and in 1318 the last Rājā, Harpāl, was flayed alive. Deogiri then became an important base for operations in Southern India, and Muhammad bin Tughlak conceived the idea of making it his capital. In 1339 he undertook to transport the whole population of Delhi to this place, and changed its name to Daulatābād. From here he directed his campaigns against the Rājās of Warangal. Troubles having broken out in Northern India, the king left his new capital to suppress them. During his absence the Muhammadan governors of the newly acquired provinces revolted; and in the confusion which ensued Zafar Khān, the governor of Gulbarga, succeeded in capturing Daulatābād, which remained in the possession of the Bahmanis until 1526, when it was taken by the Nizām Shāhis, to be again wrested from them by the emperor Akbar. After the fall of Ahmadnagar the Nizām Shāhi capital was transferred to Kharki, the present Aurangābād, which had been founded by Malik Ambar, the Nizām Shāhi minister; and Daulatābād was retaken and remained in their possession until its capture in 1633 by Shāh Jahān's general. It

remained part of the Mughal empire until after Aurangzeb's death, when it came into the possession of Asaf Jāh, the first Nizām of Hyderābād.

The fortress is built upon a conical rock, scarped from a height of 150 feet from the base. The hill upon which it stands rises almost perpendicularly from the plain to a height of about 600 feet. The outer wall is $2\frac{3}{4}$ miles in circumference, with three lines of fortifications between it and the base of the upper fort. The outer wall formerly enclosed the ancient city of Deogiri, but a village is now all that remains.

Besides the fortifications, the chief buildings are the Chānd Minār and Chīni Mahal. The Chānd Minār, which is 210 feet high and 70 feet in circumference at the base, was erected by Alā-ud-dīn Bahmani to commemorate his conquest of the fort. The basement is 15 feet high, containing twenty-four chambers, and the whole pillar was originally covered with glazed Persian tiles of much beauty. It is considered one of the most striking pieces of Muhammadan architecture in Southern India. To the south of this is a small mosque, with a Persian inscription giving the date of its erection as 849 Hijri (1445). The Chīni Mahal (or 'China palace'), which was once a building of great beauty, is 40 feet to the right of the eighth gate of the fort; it was here that Abul Hasan or Tāna Shāh, the last of the Kutb Shāhi kings, was imprisoned by Aurangzeb in 1687. The fort has altogether eight gates; and several pieces of ordnance are still to be seen on the bastions. Daulatābād is noted for its black and white grapes, but of late years the produce has deteriorated considerably for want of care and proper pruning.

Daulatkhān.—Village and former head-quarters of the Dakhin Shāhbāzpur subdivision, Backergunge District, Eastern Bengal and Assam, situated in 22° 38′ N. and 90° 49′ E. Population (1901), 381. The village was destroyed in the storm-wave of 1876, nearly all the inhabitants being drowned, and again suffered severely in the cyclone of 1893; but it is still an important centre of trade, the principal article of export being areca-nuts. Daulatkhān is connected by road with Bholā and Tarnir Hāt, and the service of steamers between Barisāl and Noākhāli calls here four days in the week.

Daulatpur.—Village in the head-quarters subdivision of Khulnā District, Bengal, situated in 22° 53′ N. and 89° 32′ E., on the Bhairab river. Population (1901), 808. Daulatpur has a large trade in betel-nuts. It is a station on the Eastern Bengal State Railway, and contains an Arts college and English high school and the *tahsīl kacheri* of the Saidpur Trust estate.

Daunggyi.—Town in Bassein District, Lower Burma. *See* NGA-THAINGGYAUNG.

Daur.—Valley in the Northern Wazīristān Agency, North-West

Frontier Province, lying between 32° 50′ and 33° N. and 69° 55′ and 70° 25′ E. The valley lies on the banks of the Tochi, extending from the point where that river leaves the Wazīr hills to where it re-enters them near Khajuri, about 15 miles from the western border of Bannu District. Daur is thus entirely surrounded by the Wazīr hills, the highest peak in it being Vezhda (7,700 feet). Its length is 35 miles and its breadth averages 1½ miles, but it widens to 5 or 6 miles at its broadest part. The protected area, which extends to the crests of the hills nearest the river on both banks, measures about 700 square miles. Like most frontier valleys, it is divided into Lar or Lower and Bar or Upper Daur, the former comprising the larger area. The climate is bracing and healthy in the cold season, but malarious and unhealthy in the hot months, especially in August and September. The annual rainfall probably exceeds 15 inches.

Of the ancient history of Daur nothing is known. A mound near Idak is said to mark the site of its ancient capital. In 1700 Bahādur Shāh, then viceroy of Kābul, passed through the valley on his way from Khost to Bannu after effecting an arrangement with the tribes; but on his return in the following year his forces were repulsed, and he was compelled to pay heavy sums to secure an unopposed passage. Eventually Daur fell nominally under Durrāni rule; but it remained virtually independent till 1893, when by the treaty with the Amīr of Afghanistān it came within the British sphere of influence, the actual boundary being demarcated in 1895. While the Demarcation Commissioner was in Daur, the people petitioned that the whole valley should be taken over by the British Government, in order to protect them against the raids of their neighbours, the Wazīrs and Mahsūds.

Daur contains about 75 walled hamlets. Its resident population in 1903 was 24,670. These are mostly Dauris, a race of 'gross satyr-like spadesmen,' morally the lowest of the Afghān races. Other Afghān tribes despise the Dauris, whom they describe as the progeny of a Bannuchi father and a Dum or low-caste mother. The Dauris are diligent, hardworking, and patient cultivators, developed physically by the use of the spade, the plough being useless in the heavy alluvial soil of the valley; but, though fanatical, they are unwarlike. Their neighbours, despite frequent efforts, were never able to oust them from their valley, though the Wazīrs have established small settlements wherever they could get a foothold, and hold a large area in proportion to their numbers. Of the resident population, 21,000 are agriculturists and entirely dependent on the soil, the pressure on which is heavy.

The lands of the valley are extremely rich, and grow heavy crops of maize, rice, millet, sugar-cane, wheat, and barley. The growth of trees is only now beginning, but promises well. Mulberry, *chinār*, willow, and fruit trees do best. There is a fairly extensive weaving industry,

for which cotton is imported. The cultivated area is 15,262 acres, or about five-eighths of an acre per head of population. Tenants cultivate about one-third of this area and pay heavy rents in kind, two-thirds of the gross produce being the usual amount. Daur used to be celebrated for its horses, but the breed is now extinct. Goats and sheep find good grazing in the neighbouring hills, despite their barren appearance.

The system of irrigation is that common in the Afghān hills, being carried on by means of channels cut from the Tochi river and its tributary torrents. These watercourses are so well designed that the cultivated area in Daur proper is hardly capable of great extension, though flood-channels which would carry the fertilizing flood-waters of the Tochi to the higher lands are feasible, and will greatly improve the quality of a large area.

The principal customers of the Dauris are the surrounding Wazīr tribes, to whom the surplus produce of the valley is sold. It has no other trade.

Daur is under the Political Agent, Northern Wazīristān, who is assisted by a *tahsīldār* and three *naib-tahsīldārs*. The Indian Penal Code and the Code of Criminal Procedure, and also Regulations III and IV and VII of 1901, are in force in Daur; but as a rule Muhammadan law modified by local customs is administered. The principle underlying these customs is the usual Pathān claim of 'an eye for an eye, and a tooth for a tooth'; but every Dauri has his price, whereby his wounds or pride may be salved, and for most offences a fixed sum is laid down, by paying which an offender may pacify the party he has injured. In practice, however, the amount actually paid depends on the strength and influence of the opposing parties, and the weaker usually goes to the wall. As a rule, a Hindu or a woman counts as half a man. Intention is not regarded, only the result, so that accidental homicide incurs all the penalties of murder. The blood-feud flourishes, and is regulated by a short and simple unwritten code. There is a regular tariff for bodily injuries, and theft is punished by a fine.

Under the terms of their petition of 1895, the Dauris agreed to pay a tithe of the gross produce to the British Government. For eight years this tithe was commuted into a payment of Rs. 8,000, levied by means of a house tax; but in 1903 a revenue settlement of the valley was made, a record-of-rights being drawn up and the tithe assessed at Rs. 36,000. In addition, a shop and artisan tax of Rs. 1,500 is levied, raising the total revenue of the valley to Rs. 37,500. This assessment has been sanctioned for ten years from the autumn of 1903, with the proviso that if any considerable number of villages desire to pay in kind, they shall be permitted to do so.

Government schools have been established at Miram Shāh, Idak, Hassū Khel, and Tappi.

Dāvangere Tāluk.—North-western *tāluk* of Chitaldroog District, Mysore, including the Harihar sub-*tāluk*, and lying between 14° 13′ and 14° 38′ N. and 75° 38′ and 76° 10′ E., with an area of 556 square miles. The population in 1901 was 109,121, compared with 94,565 in 1891. There are three towns, DĀVANGERE (population, 10,402), the head-quarters, HARIHAR (5,783), and Malebennūr (2,056); and 259 villages. The land revenue demand in 1903–4 was Rs. 1,86,000. The Tungabhadra river runs along the western boundary, receiving the Haridra from the south near Harihar. The south-west is bounded by a chain of hills skirting the right bank of the Tungabhadra. Except where a low range crosses from east of Māyakonda to Anaji, the *tāluk* is a wide unbroken plain, sloping down to Harihar and the river in the north-west, on which the insignificant Bāti hill makes a conspicuous figure, while Uchchangidurga looms formidable on the north-east just over the border. Black soil prevails in the west, and stony or gravelly soil in the east, but these are often intermixed, together with patches of red. The chief crops cultivated are *jola*, cotton, and *rāgi*. Rice and sugar-cane are grown to a small extent near tanks. The *tāluk* is noted for the manufacture of blankets, of which some of the finest texture are valued as high as from Rs. 200 to Rs. 300.

Dāvangere Town.—Head-quarters of the *tāluk* of the same name in Chitaldroog District, Mysore, situated in 14° 28′ N. and 75° 55′ E., on the Southern Mahratta Railway. Population (1901), 10,402. It was originally an obscure village, a suburb of Bettūr. Haidar Alī gave it as a *jāgīr* to a Marāthā chief named Apojī Rām, who encouraged merchants to settle here. He died without heirs, but the place continued to increase, being favoured by Tipū Sultān, and is now the most populous town in the District. The merchants are principally Sivabhaktas or Lingāyats. The most valuable trade is that with Wālājāpet in North Arcot in the east, and with Nagar and Sāgar in the west. Areca-nuts and pepper from the latter are exchanged for goods from Europe and China, and articles from the eastern islands imported through Madras, as well as salt. Blankets made in the District are sent to the Malnād. There is a large trade in cotton, and a cotton-ginning factory has been established by a European firm. Agents of Bombay houses are stationed here for the purchase of oilseeds, &c. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 14,200 and Rs. 12,600. In 1903–4 they were Rs. 17,000 and Rs. 29,000.

David, Fort St.—Historic fort in South Arcot District, Madras. *See* FORT ST. DAVID.

Debar.—Lake in Udaipur State, Rājputāna. *See* DHEBAR LAKE.

Debhāta.—Town in the Sātkhira subdivision of Khulnā District, Bengal, situated in 22° 34′ N. and 88° 58′ E., on the Jamunā. Population (1901), 5,454. There is a local trade in *sundri* wood (*Heritiera littoralis*), and lime is manufactured from shells. Debhāta was constituted a municipality in 1876. The income and expenditure during the decade ending 1901–2 averaged Rs. 2,000 each. In 1903–4 the income was Rs. 2,000, mainly from a tax on persons (or property tax); and the expenditure was Rs. 1,800.

Debī Pātan.—Village in the Utraulā *tahsīl* of Gondā District, United Provinces, situated in 27° 32′ N. and 82° 24′ E., on the Bengal and North-Western Railway. Population (1901), 830. This is an ancient site connected by tradition, like many other places, with Rājā Karna mentioned in the Mahābhārata. It is now occupied by a celebrated temple built from the ruins of earlier shrines, and sacred to Siva. Aurangzeb is said to have been attracted by its popularity and to have sent an officer who slew the priests, broke the images, and defiled the holy places. A large fair is held in March, attended by 80,000 to 100,000 persons, when many buffaloes, goats, and pigs are sacrificed. There is some trade in ponies from the hills and in agricultural produce, while the Nepālese buy piece-goods at the annual fair.

Deccan (or *Dakhin*).—This name, a corruption of the Sanskrit *dakshina* = 'southern,' includes, in its widest sense, the whole of India south of the Narbadā river, or, which is nearly the same thing, south of the Vindhya mountains. In its narrower sense it has much the same meaning as MAHĀRĀSHTRA, or the country where the Marāthī language is spoken, if the below-Ghāt tract be omitted. In this connotation its southern boundary lies along the course of the Kistna river. In a still narrower sense the Deccan is regarded as bounded on the north by the Sātmāla hills. Adopting the broadest meaning, the Deccan on its western side descends seaward by a succession of terraces from the WESTERN GHĀTS, which rise in parts to over 4,000 feet in height and terminate abruptly near Cape Comorin, the extreme southern point of the peninsula, at an elevation of 2,000 feet. From here, following the coast-line, the EASTERN GHĀTS commence in a series of detached groups, which, uniting in about latitude 11° 40′ N., run north-eastward along the Coromandel coast, with an average elevation of 1,500 feet, and join the Vindhyas, which cross the peninsula from west to east, in nearly the same latitude (13° 20′ N.) as their western counterpart. The Vindhyan range thus joins the northern extremities of the two Ghāts and completes the peninsular triangle of the Deccan. The eastern side of the enclosed table-land being much lower than the western, all the principal rivers of the Deccan—the Godāvari, Kistna, and Cauvery—rising in the Western Ghāts, flow eastward, and escape by openings in

the Eastern Ghāts into the Bay of Bengal. Between the Ghāts and the sea on either side the land differs in being, on the east, composed in part of alluvial deposits brought down from the mountains, and sloping gently; while on the west the incline is abrupt, and the coast strip is broken by irregular spurs from the Ghāts, which at places descend into the sea in steep cliffs.

[1] The Deccan table-land is one of the relics of the old Gondwāna continent which formerly connected India with Africa, and which broke up at about the time that the chalk was forming in Europe. It is one of the few solid blocks of ancient land which have not suffered any of the folding movements so marked in most lands, and which, so far as we know, have never been depressed below the ocean. Except near the present coasts at low levels, not a single marine fossil has been found in the whole Deccan. The 'basement complex' of the Deccan table-land includes the usual assemblage of gneisses and schists, among them the band of schists distinguished by the name of the Dhārwārs, containing the auriferous veins of Mysore which have, since they were opened up in 1881, yielded gold to the value of 19 millions sterling. Lying on the denuded surfaces of these ancient schists and gneisses are enormous thicknesses of unfossiliferous strata which, in default of evidence to the contrary, are regarded as pre-Cambrian in age. These occur as isolated patches in the Cuddapah and Kurnool Districts of Madras; in the Southern Marāthā country; in parts of the Godāvari valley; and in Gwalior, Bundelkhand, and the Vindhyan region of Central India. In small basins, generally preserved at lower levels, we find the coal-bearing deposits formed by the great rivers of the old Gondwāna continent in upper palaeozoic and mesozoic times, while for an area of some 200,000 square miles the older rocks are covered with great masses of basaltic lava, which spread over the country in Upper Cretaceous times and now form the highlands of the Deccan, remaining practically as horizontal as they must have been when they flowed as molten sheets over the country. Here and there, where the Deccan trap has been cut through by weather influences, we get glimpses of the old land-surface which was overwhelmed by lava-flows, while between the flows there were apparently interruptions sufficient to permit of the development of life in the lakes and rivers, of which the records are preserved in the so-called inter-trappean beds of fresh-water limestone, shales, and sandstones. The scenery of the Deccan trap highlands is the result of the subaerial erosion of the horizontal sheets of lava; the first plateaux of the hill-tops, and the horizontal terraces which are traceable for miles along the scarps, are features eminently characteristic of the weathering of basaltic lava-flows. The long grass, the general absence of large trees, and the occurrence of almost purely deciduous

[1] Contributed by Mr. T. H. Holland, Director, Geological Survey of India.

species, combine with the outlines of the hills to distinguish the trap areas from all others in the Deccan.

Two peculiar features of the Deccan are worth special mention: one is the occurrence, over most of the trap area, of the peculiar black, argillaceous, and calcareous soil known as *regar*, and, from its suitability for cotton-growing, as 'cotton soil'; the other is the peculiar decomposition product known as laterite, which is essentially a dirty mixture of aluminic and ferric hydrates, formed by a special form of rock alteration confined to moist tropical climates, and often resembling the material known as bauxite which is worked as a source of aluminium.

Little is known in detail of the history of the Deccan before the close of the thirteenth century. Hindu legends tell of its invasion by Rāma, and the main authentic points known are the coming of the first Aryans (*c.* seventh century B.C.), the advance of the Mauryas (250 B.C.), and the Scythic invasion of A.D. 100. Archaeological remains and inscriptions bear witness to a series of dynasties, of which the Cholas, the Andhras or Sātavāhanas, the Chālukyas, the Rāshtrakūtas, and the Yādavas of Deogiri are the best known. (*See* BOMBAY PRESIDENCY—History.) The country was known to the author of the *Periplus* in the third century A.D. as Dachina Bades (Dakshināpata), and to the Chinese pilgrim Fa Hian in the fifth century as Ta Thsin. Continuous history commences with the Muhammadan invasion of 1294–1300, when Alā-ud-dīn, the Khiljī emperor of Delhi, overran Mahārāshtra, Telingāna, and Karnāta. In 1338 the reduction of the Deccan was completed by Muhammad bin Tughlak; but a few years later a general revolt resulted in the establishment of the Muhammadan Bahmani dynasty, and the retrogression of Delhi supremacy beyond the Narbadā. The Bahmani dynasty advanced its eastern frontier at the expense of the Hindu kingdom of Telingāna to Golconda in 1373, to Warangal in 1421, and to the Bay of Bengal in 1472. A few years later (1482) it began to disintegrate, and was broken up into the five rival Muhammadan kingdoms of BIJĀPUR, AHMADNAGAR, GOLCONDA, BĪDAR, and BERĀR. These were counterbalanced in the south, as the Bahmani empire had been, by the great Hindu kingdom of VIJAYANAGAR, which was however destroyed in 1565, at the battle of Tālikotā, by a coalition of the Muhammadan powers. Of these, Bīdar and Berār became extinct before 1630; the other three kingdoms were restored to the Delhi empire by the victories of Akbar, Shāh Jahān, and Aurangzeb. The Deccan was thus for a second time brought under the Delhi rule, but not for long. The Marāthās in 1706 obtained the right of levying tribute over Southern India, and their leading chiefs, who had practically superseded the dynasty of Sivajī, were the Peshwās of Poona. A great Delhi viceroy (the Nīzam-ul-mulk), rallying all the Muhammadans of the South round him, established the Nizāmat of HYDERĀBĀD. The

remainder of the imperial possessions in the Deccan was divided among minor princes, who generally acknowledged the supremacy of the Peshwā or the Nizām, according as they were north or south of the Tungabhadra. MYSORE, alternately tributary to both, became eventually the prize of Haidar Alī, while in the extreme south the Travancore State enjoyed, by its isolated position, uninterrupted independence. Such was the position of affairs early in the eighteenth century. Meanwhile Portugal, Holland, France, and England had effected settlements on the coast; but the two former on so small a scale that they took no important part in the wars of succession between the native princes which occupied the middle of the century. The French and English, however, espoused opposite sides, and their struggles eventually resulted in establishing the supremacy of the latter (1761), which became definitely affirmed, under Lords Wellesley and Hastings, by the establishment of British influence at Hyderābād, the overthrow of Tipū Sultān, and the Marāthā Wars which followed, and the annexation of the Peshwā's dominions in 1818. The dominions of the other important Marāthā chief of the Deccan, the Bhonsla Rājā of Nāgpur, lapsed to the British on the extinction of the dynasty in 1854. The Deccan is to-day included in the Presidency of Madras, part of Bombay and the Central Provinces, together with Hyderābād, Mysore, and other Native States.

Dedān.—Petty State in KĀTHIĀWĀR, Bombay.

Dedarda.—Petty State in KĀTHIĀWĀR, Bombay.

Dedaye Township.—Eastern township of Pyapon District, Lower Burma, lying between 16° 8′ and 16° 29′ N. and 95° 43′ and 96° 6′ E., with an area of 372 square miles. It is triangular in shape, being bounded by the Pyapon and To rivers on the west and east respectively, and by the sea on the south. The population, which was 56,798 in 1891, has increased at the comparatively slow rate of 18 per cent. during the decade ending 1901, in the latter year reaching a total of 66,995, which was distributed at the rate of 180 persons per square mile over 312 villages and one town, DEDAYE (population, 5,193), the head-quarters, situated on the To river. The cultivated area increased from 155 square miles in 1891 to 270 square miles in 1903–4, paying Rs. 3,81,000 land revenue.

Dedaye Town.—Head-quarters of the township of the same name in Pyapon District, Lower Burma, situated in 16° 26′ N. and 95° 56′ E., on the right bank of the China Bakīr river, about 15 miles from its mouth. Population (1901), 5,193. The town is low-lying, and surrounded by paddy-fields. It contains the most important pagoda in the District, the Tawkyat. Lying on the main line of communication between Rangoon, Bassein, and Ma-ubin, it is a trade centre of some importance, but it has not yet been constituted a municipality or a 'notified area.'

Dedhrota.—Petty State in MAHI KĀNTHA, Bombay.

Deeg.—District and head-quarters thereof in Bharatpur State, Rājputāna. *See* DĪG.

Deesa (*Dīsa*).—Cantonment in the Pālanpur Agency, Bombay, situated in 24° 14′ N. and 72° 12′ E., on the river Banās, about 300 miles north-by-west of Bombay City, on the Pālanpur-Deesa branch of the Bombay, Baroda, and Central India Railway. Population (1901), 11,047 in cantonment, and 3,686 in the native town. The cantonment is situated on the left bank of the Banās, three miles north-east of the Native town. The garrison consisted in 1905 of a regiment of Native infantry. Deesa town is surrounded with a wall and towers, now in ruins. In former times it successfully resisted the attacks of the Gaikwār of Baroda and of the Rādhanpur forces. There are two Jain temples and a mosque of interest. The income of the cantonment fund amounted in 1903-4 to Rs. 35,000, and the expenditure to Rs. 32,000.

Deglūr Tāluk.—Southern *tāluk* of Nānder District, Hyderābād State, with an area of 397 square miles. The population in 1901, including *jāgīrs*, was 77,834, compared with 79,793 in 1891, the decrease being due to the famine of 1900. The *tāluk* contained till recently one town, DEGLŪR (population, 6,917), the head-quarters; and 159 villages, of which 56 are *jāgīr*. The land revenue in 1901 was 2 lakhs. The river Mānjra forms the eastern and the Lendi the southern boundary. The soils are alluvial and *regar*, and partly sandy. The *paigāh tāluk* of Kharka, with a population of 27,612 and 67 villages, lies to the west, and has an area of about 265 square miles. In 1905 Deglūr was enlarged by the addition of part of the Bānswāda *tāluk* of Indūr (Nizāmābād) and some villages from Udgīr in Bīdar District.

Deglūr Town.—Head-quarters of the *tāluk* of the same name in Nānder District, Hyderābād State, situated in 18° 33′ N. and 77° 35′ E. Population (1901), 6,917. It contains the Second Tālukdār's and police inspector's offices, a post office, a police station, a school, and a dispensary. A weekly market is held, at which large quantities of grain are sold. The tomb of Shāh Ziā-ud-dīn Rifai is visited by numbers of pilgrims at the annual *urs*, and an old temple stands near a tank.

Dehgām.—Head-quarters of the *tāluka* of the same name in Kadi *prānt*, Baroda State, situated in 23° 11′ N. and 72° 52′ E., on the Ahmadābād-Parāntīj Railway. Population (1901), 4,884. It possesses a magistrate's court, dispensary, vernacular school, and local offices. A sword-making industry on a small scale exists. The municipality receives an annual grant of Rs. 2,000.

Dehli.—Division, District, *tahsīl*, and city in the Punjab. *See* DELHI.

Dehra Dūn District.—District in the Meerut Division, United Provinces, lying between 29° 57′ and 31° 2′ N. and 77° 35′ and 78° 18′ E., with an area of 1,209 square miles. It is bounded on the north-east by the Tehrī State; on the south-east by Garhwāl District; on the north-west by the Sirmūr, Rawain, Taroch, and Jubbal States of the Punjab; and on the south-west by Sahāranpur District.

Physical aspects.

The District consists of two distinct portions. The greater part of it forms a gently sloping valley, 45 miles long and 15 to 20 miles broad, between the HIMĀLAYAS and the SIWĀLIK HILLS, divided into two parts by a connecting ridge, from which the Eastern Dūn slopes down to the Ganges and the Western Dūn to the Jumna. The scenery of these mountain dales can hardly be surpassed for picturesque beauty even among the lovely slopes of the massive chain to which they belong. On the north, the outer range of the Himālayas rises abruptly to a height of 7,000 or 8,000 feet, with the hill station of MUSSOORIE and the cantonments of LANDOUR and CHAKRĀTĀ. The Siwāliks rise with a more gentle slope on the south-west of the valley, but fall away suddenly to the great plain of the DOĀB. The other portion of the District is the Jaunsār-Bāwar *pargana* or Chakrātā *tahsīl*, which strikes north from the outer range of the Himālayas between the valleys of the Tons and Jumna, and consists of a confused mass of ridges and spurs clothed with forest. The drainage of Jaunsār-Bāwar falls into the Tons or the Jumna, which unite where they penetrate the outer range. The Western Dūn is drained by the Asan, which falls into the Jumna, and the Eastern Dūn by a network of small channels which meet and diverge, again and again, before they join the Ganges. Both the Jumna and Ganges are here rapid rivers pouring over beds of boulders in several channels with islands between.

The Siwālik range is composed in its lower and southernmost parts of middle Siwālik soft sandstone or sand-rock with a few thin mammalian fossil-bearing conglomerates, and along its crest of thick upper Siwālik conglomerates. These are all of fresh-water origin, and dip at low angles below the flat surface of the valley. The latter is a broad expanse of recent gravels and consolidated fans of scree derived from the higher ranges. On the north of the valley the middle and upper Siwāliks again emerge, bent into sharp reversed folds by faulting against the older Himālayan series. The much-contorted outer Himālayan rocks include the slates and dark-grey limestones or dolomites of the Mussoorie ridge, the Jaunsār series of dark slates, quartzites, fine volcanic ashes, and basic traps, the Deoban massive limestone which comes above the latter and forms much of the rugged elevated country north of Chakrātā, and finally the Māndhātā conglomerates and Bāwar quartz-schists, which lie flatly above both of the latter series. All these

older rocks have proved unfossiliferous and are probably very ancient. Lead and sulphur mines are found on the Tons river at 30° 43′ N., and gypsum in the limestones below Mussoorie[1].

The arboreal vegetation of the Siwāliks consists largely of species occurring both on the lower slopes of the Himālayas and in the hilly districts of Central and Southern India. Epiphytic orchids are absent, and ferns are but few. The Himālayan long-leaved pine (*Pinus longifolia*) is found, and the *sāl* (*Shorea robusta*) is here near its western limit and appears only in a stunted form. In the valley a rich vegetation is kept green throughout the whole year. The prevailing forest tree is *sāl*, and the flora is an interesting mixture of species found in the plains and species from the lower hills. In the Himālayas the vegetation gradually changes at higher elevations to European genera, and the *deodār*, silver spruce, and weeping pine are found[2].

The District is singularly rich in animal life, though the game has been shot down lately. Wild elephants are found in the Siwāliks, and tigers, leopards, sloth bears, spotted and other deer, and monkeys in the forests. Among game-birds may be mentioned the black and grey partridge, peafowl, florican, snipe, woodcock, pheasant, &c. The rivers abound in fish. Mahseer of 40 lb. to 60 lb. weight are frequently caught, and so-called trout (*rohū*) and other species are found in the smaller rivers. The *gūnch* or fresh-water shark is also common.

Extremes of heat and cold in the valley are unknown. The proximity of the Himālayas cools the atmosphere; the hot blasts from the plains do not reach so far, while the heavy rains of the monsoon bring an abundant downpour, and even in May and June occasional showers refresh the country. The Eastern Dūn is malarious in the extreme, and is entirely deserted during the rainy season. The temperature in the valley ranges from 37° to 101°, while at Mussoorie it has a range from 27° to 81°.

The rainfall varies much from one part of the District to another. At Dehra it is 89 inches; at Rājpur, near the foot of the Himālayas, 121; at Mussoorie, 96; and at Chakrātā, 80 inches. The annual fall for the whole District averages 95 inches, and any approach to a real drought is unknown within the memory of man.

History.

In the earliest ages of Hindu legend, Dehra Dūn formed part of the mythical region known as Kedārkhand, the abode of the great god Siva, whose sovereignty is still commemorated in the name of the Siwālik Hills. Many generations later, according to the most ancient myths of the Aryan settlers

[1] H. S. Medlicott, *Memoirs, Geological Survey of India*, vol. iii, pt. ii, and R. D. Oldham, *Records, Geological Survey of India*, vol. xvi, pt. iv.

[2] *Gazetteer of the Himālayan Districts*, 1882, vol. i, chap. vii.

the valley became bound up with the two great epics of the Rāmāyana and Mahābhārata. Hither came Rāma and his brother, to do penance for the death of the demon-king, Rāvana; and here sojourned the five Pāndava brethren on their way to the inner recesses of the snowy range, where they finally immolated themselves upon the sacred peak of Mahā Panth. Another memorable legend connects the origin of the little river Suswā with the prayers of 60,000 pigmy Brāhmans, whom Indra, the rain-god, had laughed to scorn when he saw them vainly endeavouring to cross the vast lake formed by a cow's footprint filled with water. The indignant pigmies set to work, by means of penance and mortifications, to create a second Indra who should supersede the reigning god; and when their sweat had collected into the existing river, the irreverent deity, alarmed at the surprising effect of their devotions, appeased their wrath through the good offices of Brahmā. Traditions of a snake, Bāmun, who became lord of the Dūn on the summit of the Nāgsidh Hill, seem to point towards a period of Nāgā supremacy. The famous Kālsī stone, near Haripur, on the right bank of the Jumna, inscribed with an edict of the Buddhist emperor Asoka, may mark the ancient frontier of Northern India. It consists of a large quartz boulder, standing on a ledge which overhangs the river, and is covered with the figure of an elephant, besides an inscription in the ordinary characters of the period. Hiuen Tsiang does not mention any cities which can be identified as lying within the present District; and tradition asserts that it remained without inhabitants until the eleventh century, when a passing caravan of Banjārās, struck with the beauty of the country, permanently settled on the spot.

Authentic history, however, knows nothing of Dehra Dūn till the seventeenth century, when it formed a portion of the Garhwāl kingdom. The town of Dehra owes its origin to the heretical Sikh Gurū, Rām Rai, a Hindu anti-pope, who was driven from the Punjab and the Sikh apostolate by doubts as to the legitimacy of his birth, and obtained recommendations from the emperor Aurangzeb to the Rājā of Garhwāl, Fateh Sāh. His presence in the Dūn shortly attracted numerous devotees, and the village of Gurudwāra or Dehra grew up around his abode. The Rājā endowed his temple, a curious building of Muhammadan architecture, with the revenue of three estates. The Gurū possessed the miraculous power of dying at will, and returning to life after a concerted interval; but on one occasion, having mistaken his reckoning, he did not revive. The bed on which he died still forms an object of reverence to the devout worshippers at his cenotaph. Monuments of earlier date, erected by one Rānī Karnāvati, still exist at Nawādā. Fateh Sāh died soon after the arrival of Rām Rai, and was succeeded (1699) by his infant grandson, Pratāp Sāh, whose reign extended over the greater part of a century. But the flourishing condition of his

domain attracted the attention of Najīb-ud-daula, governor of Sahāranpur, who crossed the Siwāliks with a Rohilla army in 1757, and occupied the Dūn without serious opposition. Under Najīb-ud-daulā's benevolent and enlightened administration, the District rose to an unexampled degree of prosperity. Canals and wells irrigated the mountain-sides; Muhammadan colonists brought capital to develop the latent resources of the soil; and mango groves, still standing among primaeval forest, bear witness even now to the flourishing agriculture of this happy period. But Najīb-ud-daula's death in 1770 put an end to the sudden prosperity of the Dūn. Henceforth a perpetual inundation of Rājputs, Gūjars, Sikhs, and Gurkhas swept over the valley, till the once fertile garden degenerated again into a barren waste. Four Rājās followed one another on the throne; but the real masters were the turbulent tribes on every side, who levied constant blackmail from the unfortunate cultivators.

Meanwhile, the Gurkhas, a race of mixed Nepālese origin, were advancing westward, and reached at last the territories of Garhwāl. In 1803 Rājā Parduman Sāh fled before them from Srīnagar into the Dūn, and thence to Sahāranpur, while the savage Gurkha host overran the whole valley unopposed. Their occupation of Dehra Dūn coincided in time with the British entry into Sahāranpur, and the great earthquake of 1803 proved the miraculous harbinger of either event. The Gurkhas ruled their new acquisition with a rod of iron, so that the District threatened to become an absolute desert. Under the severe fiscal arrangements of the Gurkha governors, slavery increased with frightful rapidity, every defaulter being condemned to lifelong bondage, so that slaves became far cheaper in the market than horses or camels. From this unhappy condition the advent of the British rule rescued the feeble and degraded people.

The constant aggressions of the Gurkhas against the frontier compelled the British Government to declare war in 1814. Dehra was immediately occupied, while siege was laid to the hill fortress of Nālāpāni or KALANGA, which fell after a gallant defence, with great loss to the besieging force. The remnant of its brave garrison entered the service of Ranjīt Singh, and afterwards died to a man in battle with the Afghāns. A resolution of Government, dated November 17, 1815, ordered the annexation of the new possession to Sahāranpur; while the Gurkhas, by a treaty drawn up in the succeeding month, formally ceded the country. The organization of the District on the British model proceeded rapidly; and in spite of an ineffectual rising of the disaffected Gūjars and other predatory classes led by a bandit named Kalwā, in 1824, peace was never again seriously disturbed. Under the energy and perseverance of its first British officials, the Dūn rapidly recovered its prosperity. Roads and canals were constructed; cultiva-

tion spread over the waste lands; and the people themselves, awaking from their previous apathy, began to acquire habits of industry and self-reliance. Jaunsār-Bāwar, now included in the Chakrātā *tahsīl*, historically an integral portion of Sirmūr, had been conquered in the same campaign as the Dūn, but was at first erected into a separate charge under a Commissioner subordinate to the Resident at Delhi. In 1829, however, it was incorporated with the present District, of which it has ever since formed a part. The Mutiny of 1857 produced little effect in this remote dependency, cut off by the Siwāliks from direct contact with the centres of disaffection in the Doāb or the Delhi Division; and though a party of Jullundur insurgents, 600 strong, crossed the Jumna into Dehra Dūn, they traversed the District without stopping, and never came into collision with the pursuing troops.

The Asoka inscription at Kālsī has already been referred to. It is of great interest as preserving the names of the kings of Western countries who were contemporaries of Asoka. At Madhā on the Jumna, 25 miles north-east of Kālsī, some old temples and interesting remains are found. The chief temple, called Lakkha Mandir, contains two inscriptions which, though undated, probably belong to about A. D. 600 to 800. One of the inscriptions refers to the founding of a temple by a princess of Jullundur in the Punjab[1]. An old temple at Rikhikesh, on the Ganges, which is said to have been built by Sankarāchārya, marks a stage on the pilgrim route to Badrīnāth.

Population.

The number of towns in the District is 6, and of villages 416. The population at each Census in the last thirty years has been: (1872) 116,945, (1881) 144,070, (1891) 168,135, and (1901) 178,195. The District is divided into two *tahsīls*, DEHRA and CHAKRĀTĀ, the head-quarters of which bear the same names. The chief towns are the municipalities of DEHRA and MUSSOORIE. There are three cantonments: at Dehra, LANDOUR (adjoining Mussoorie), and CHAKRĀTĀ.

The principal statistics of population in 1901 are shown below:—

Tahsīl.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Dehra . .	731	4	377	127,094	174	+ 8.2	12,188
Chakrātā . .	478	2	39	51,101	107	+ 0.8	393
District total	1,209	6	416	178,195	147	+ 6.0	12,581

Of the total population, 83 per cent. are Hindus, 14 per cent. Musalmāns, 1.8 per cent. Christians, and 0.8 per cent. Aryas. Western Hindī

[1] *Epigraphia Indica*, vol. i, p. 10.

is the principal language in the valley, while almost all the people in the hills speak the Jaunsārī dialect of Central Pahārī.

The most numerous caste is that of Rājputs, who number 32,000, or more than one-fifth of the total number of Hindus (148,000), which is a high percentage for this caste. Chamārs (leather-workers and labourers) number 21,000; Brāhmans, 17,000; and Korīs (weavers and labourers), 12,000. Out of a Muhammadan population of 25,000, Shaikhs number 8,000 and Pathāns 5,000. In the hill tracts of the District, Brāhmans and Rājputs are divided, as in Kumaun, into the Khas branch and the ordinary divisions of these castes, the former being looked on as aboriginal. Among the Khas Rājputs polyandry is commonly practised. Of other castes peculiar to the District may be mentioned the Bājgīs (singers and musicians), 6,000; and the Doms (aborigines, now labourers), 8,000.

The number of native Christians is 1,305, while there are 1,829 Europeans and Eurasians. The principal missions, with the dates of their foundation, are those of the American Reformed Presbyterian Church at Dehra (1852) and Rājpur (1868); the Church Missionary Society at Annfield, with two out-stations (1857); and the Methodist Episcopal Church at Mussoorie, with six out-stations (1859). Nearly half the native Christians belong to the last named.

Agriculture.

In the hills, tillage is chiefly confined to the valleys or to terraces on the mountain slopes artificially irrigated by dams and canals. In the valley agriculture is carried on much as it is in the plains; but the Dūn cultivator, except in the Dehra plateau, is wanting in energy and skill. His cattle are weak, the holdings are small, and methods rude. There is some fine land in the Eastern Dūn; but the valley as a whole is not a good wheat country, and rains crops and crops with long tap-roots do best. The surface soil is, as a rule, shallow, and below it lies a gravel subsoil which soon drains away the moisture from the upper layers. The crop seasons in the valley are the same as in the plains, but harvest is a month or two later.

The main agricultural statistics for 1903-4 are given below, in square miles:—

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.	Forests.
Dehra . . .	731	122	35	139	278
Chakrātā . .	478	31	2	7	142
Total	1,209	153	37	146	420

The staple food-grains are wheat, rice, *maruā*, and barley; the areas under which in 1903-4 were 54, 32, 22, and 16 square miles. Maize, gram, and *jowār* are also important food-crops, with a total area of

15 square miles. Oilseeds were grown on 10 square miles, and tea plantations covered 8 square miles. In the hills, ginger, turmeric, and chillies are valuable crops.

The District does not produce any surplus of grain for export, and there is in fact a considerable import, especially since the growth of Mussoorie and the extension of the railway. Dams made of wooden frames filled with boulders have been successfully used to prevent erosion by torrents. The tea industry is not very flourishing, owing to the loss of the market in Afghānistān and Central Asia. Experiments in the cultivation of rhea fibre and in sericulture have not proved a success, and grants of waste land to European settlers have not been remunerative, largely owing to the difficulty of obtaining labour. Very few advances are taken under the Agriculturists' Loans Act; the amount lent in 1902 was only Rs. 5,000, and usually there are no loans. No money has been borrowed under the Land Improvement Loans Act.

There are no special breeds of cattle or horses. Cattle-breeding has been tried without success, and an attempt to improve the breed of sheep also failed. Goats are kept in very large numbers, and are penned on the land in the hills to supply manure. Owing to its cool climate, Dehra is a favourite place for keeping racing stables during the hot season.

Of the total cultivated area, 22 square miles are irrigated from Government canals and 15 from rivers and small reservoirs made by damming streams. There are only 29 wells in the whole District, and the canals supply drinking-water as well as irrigation. The canals are small works, being improvements and restorations of watercourses made long before British rule. The principal channels are the Bijāpur, drawn from the lesser Tons, a small stream in the centre of the valley; the Katāpāthar, from the Jumna; and the Rājpur, Kalanga, and Jākhan, from streams in the Eastern Dūn. The first of these was made as early as 1839. Till 1903 these canals were supplied by means of temporary dams, but permanent heads have now been constructed. Owing to the steep slopes and nature of the soil, erosion and percolation made masonry channels necessary; but the slopes are being reduced by providing falls, and the cost of extensions will be smaller. The total capital expenditure to the end of 1903–4 was 8 lakhs; and in that year the gross income was 1·1 lakhs, and the expenditure Rs. 70,000, showing a profit of 4·7 per cent. Wheat and rice are the main crops irrigated. Irrigation in the hills is carried on by small channels taken out of rivers at the head of a valley, which distribute the water to terraces.

Forests.

The 'reserved' forests in Dehra Dūn cover an area of 420 square miles. They form two divisions, each in charge of a Deputy-Conservator: the Dehra Dūn division, 278 square miles, with head-quarters at Dehra; and the Jaunsār division, 142 square miles, with head-quarters at Chakrātā. In the Dūn proper

the forests are largely *sāl*, with *haldu* (*Adina cordifolia*), *āonla* (*Phyllanthus Emblica*), *bahera* (*Terminalia belerica*), and many other species. On stiff clay soil *sain* (*Terminalia tomentosa*) and *jāmun* (*Eugenia Jambolana*) occur. Bamboos are rare here, but are found on the northern slopes of the Siwāliks. Near the rivers *khair* (*Acacia Catechu*) and *shīsham* (*Dalbergia Sissoo*) are common. On the ridges and slopes of the Siwāliks the long-leaved pine, *sāler* (*Boswellia thurifera*), and *khat-bilāwa* (*Buchanania latifolia*) are common. In Jaunsār valuable timber trees, such as *chīr* (*Pinus longifolia*), *kail* (*Pinus excelsa*), and *deodār*, are the principal forest trees. Timber is extracted and transported to the Jumna by means of long slides made of planks, which are kept wet. The timber is then formed into rafts and floated down to Delhi. Among the minor forest products may be mentioned resin and colophony. In 1903 the total forest revenue in these two divisions, which also include some forests leased from the Tehrī, Sirmūr, and other Hill States, amounted to 7·5 lakhs, and the expenditure to 3·1 lakhs.

The geology of the District has already been described. The minerals have not yet proved to be of any economic value. The stone of the Siwāliks is of little use for building. Limestone is plentiful, and lime is made as required.

Trade and communications.

There are two breweries at Mussoorie which employed 131 hands in 1903, and one at Chakrātā which employed 30, the total production being 684,000 gallons. Glass-blowing from European glass has been practised for some time, and in 1902 a small glass factory was opened at RĀJPUR. There are no other manufactures except a little cotton-weaving.

The exports to the plains include timber, bamboos, lime, charcoal, rice, and tea. The production of tea in 1903 amounted to 1·6 million pounds, or nearly 78 per cent. of the total produce of the United Provinces. In return the Dūn imports hardware, cotton cloth, blankets, salt, sugar, grain, tobacco, and spices. All these articles pass on to the hills; while the return trade consists of rice, ginger, turmeric, red pepper, honey, wax, lac, gum, resin, and other forest produce.

The Hardwār-Dehra Railway, which was opened in 1900, is a continuation of the branch line of the Oudh and Rohilkhand Railway from Laksar on the main line to Hardwār. It enters the District at the south-east corner, passes up the Eastern Dūn, and terminates at Dehra, the total length being 48 miles.

There are two main lines of metalled road communicating with the plains. One leads from Sahāranpur to Chakrātā, crossing the Siwāliks by the Timlī pass, and then traversing the Western Dūn; it is purely a military route. The other was the main route from the valley to the plains before the opening of the railway. It pierced the Siwāliks

by the Mohan pass, and crossed the centre of the valley to Dehra and thence to Rājpur at the foot of the hills below Mussoorie. A third metalled road from Dehra joins the Sahāranpur-Chakrātā road at Fatehpur. The Eastern Dūn is very badly provided with roads, and for a great portion of the rainy season the northern part is cut off from the rest of the District.

The total length of metalled roads is 54 miles, of which all but 11 miles are maintained by the Public Works department. There are 272 miles of unmetalled roads, of which 200 are maintained by the Public Works department at the cost of the District board. Avenues of trees are maintained on 12 miles.

Administration.

The chief administrative officer of Dehra Dūn is called the Superintendent. He is usually assisted by two members of the Indian Civil Service, called Assistant Superintendents, and one Deputy-Collector recruited in India. There is a *tahsīldār* at Dehra and another at Chākrātā. The District staff in other departments consists of the usual officers; but there is also a Cantonment Magistrate at Chakrātā, and the station staff officers at Dehra Dūn and Landour are *ex-officio* Cantonment Magistrates. Dehra is the head-quarters of a Conservator of the Forest department, and also of several Imperial departments.

The District has a special organization of civil courts. The Superintendent is a Civil Judge for Jaunsār-Bāwar, and the Cantonment Magistrate at Chakrātā has the powers of a Judge of a Small Cause Court in the same area. One of the Assistant Superintendents has the powers of a Subordinate Judge and Judge of a Small Cause Court in the rest of the District, which belongs to the Civil Judgeship and Sessions division of Sahāranpur. Crime is not very important, the principal offences being ordinary theft and burglary. The Chakrātā *tahsīl* is particularly free from crime.

The settlement of the land revenue in the valley has always been distinct from that of Chakrātā. Conditions in the former resembled those of the plains, while in the latter the Kumaun system was in force.

After the Dūn was annexed in 1815, the Government demand was calculated by an appraisement of the crop at the time of harvest, one-half or one-third and in some cases one-fourth being taken. In 1816 a new settlement was made for four years, based on the average collections of the previous two years. This was followed by two quinquennial settlements, in the second of which the revenue-payers were for the first time recognized as owning the land instead of being merely farmers or tenants-at-will. In 1831 the fourth settlement was made for ten years and the recently-created rights were swept away. The cultivators received a grant of proprietary rights, and a few of

the late *zamīndārs* whose ancestors had held the same position were appointed *mukaddams* or managers to collect the revenue and pay it over to Government less 10 per cent. commission. The *mukaddams* were regarded as officials and were liable to removal for misconduct. The cultivators in many cases did not realize their new position and continued to pay rent as before. In 1837–8, however, the grant of land on more favourable terms to European settlers caused a rise in the value of land, and the system led to difficulties. The Dūn was surveyed in 1838–9, the boundaries of all villages were determined, and one-fourth of the cultivable land included in each was assigned to the cultivators free for grazing, while the remainder was offered first to cultivators and then to other applicants as grants on indefinite terms. In 1840 the Superintendent proposed another *ryotwāri* settlement for twenty years, but it was not sanctioned. Both of these settlements were made at a uniform rate per acre, the distribution being left to the people; but the absence of joint responsibility prevented this from being done fairly, and there were other complaints. Accordingly, in 1845 the preparation of a regular record-of-rights was commenced, assessments were lowered, tenures inquired into, and *zamīndāri* rights conferred on the old revenue-payers where their claims were proved. The revision was completed in 1848, and re-established the *zamīndāri* system. The seventh settlement was made between 1860 and 1863. It was revised in 1865 with a view to making it permanent; but this project was never carried out, and the settlement expired in 1886, when a fresh settlement was made for ten years. The revenue then assessed varied in different tracts from 13 annas to Rs. 1–14–0 per cultivated acre, the average being R. 1. The demand amounted to 45 per cent. of the recorded 'assets.'

In Chakrātā the conditions have been totally different. Five short-term settlements were made for periods of two, three, or five years up to 1834 in the following manner. The total assessment on the whole *tahsīl* was fixed from a consideration of the previous demand, and a rough idea of the existing circumstances of the people and their business. This was announced to the *chauntra* or four representatives of the people. The *chauntra* then discussed the settlement with the *siānās* or headmen of the thirty-five *khatts* into which the *pargana* was divided, and these distributed the demand over villages in consultation with the village *siānās*. A sixth settlement on the same principle was made in 1834, but it broke down owing to quarrels between the *chauntra* and the subordinate officials. The new settlement sanctioned for ten years from 1839 accordingly set aside the *chauntra* completely, and treated each *khatt* as a *bhaiyāchārā mahāl*[1] in the plains. The assessment was based on a careful inquiry into

[1] *See* Land Revenue in article on UNITED PROVINCES.

the comparative resources of each village, and the revenue was fixed for each *khatt*, the *siānā* being responsible for the collection and distributing the fixed revenue annually. The cultivated lands are not the only basis of distribution; the number of cattle, working hands, and the general wealth of each shareholder are also considered. A plane-table measurement was first made at the next revision in 1860; but there are no fixed village boundaries. The settlement of 1860 lasted for about ten years and was followed by another for the same term. In 1884 this was revised and extended for twenty years.

The total receipts in the District from land revenue and from all sources have been, in thousands of rupees:—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . . .	62	85	92	92
Total revenue . . .	2,82	3,31	4,43	5,15

The District contains two municipalities, DEHRA and MUSSOORIE, and two towns administered under Act XX of 1856, RĀJPUR and KĀLSĪ. The total income of the District board in 1903-4 was Rs. 61,000, of which only Rs. 5,400 came from local rates, the greater part of the income being a grant from Government. The expenditure was Rs. 62,000, of which Rs. 30,000 was spent on public works.

The District Superintendent of police has a force of 3 inspectors, 50 subordinate officers, and 178 constables. Municipal police number 59, town police 7, and rural and road police 10. There are 7 police stations, and one jail with a daily average population in 1903 of 62 males and one female.

In 1901 the proportion of persons who could read and write was 7·1 per cent. (10·7 males and 2 females). This is higher than in any other District in the Provinces, and is partly due to the comparatively large number of Europeans and Eurasians who have settled here. The number of public schools increased from 39 with 1,240 pupils in 1880-1 to 47 with 2,404 pupils in 1900-1. In 1903-4 there were 60 such institutions with 2,854 pupils, of whom 311 were girls, besides 13 private establishments with 289 pupils. One school is managed by Government and 41 by the District and municipal boards. The total cost was Rs. 43,000, of which Rs. 16,000 was met from Local funds and Rs. 10,000 from fees. These were all schools for natives; but there were also 14 private schools for Europeans and Eurasians at Mussoorie, 4 of which contained college classes. The total number of children under instruction in these schools was 1,200.

In 1903 there were 11 hospitals and dispensaries, with accommodation for 78 in-patients. The number of cases treated was 60,779,

of whom 1,435 were in-patients, and 2,733 operations were performed. The income was Rs. 14,000, chiefly from Local funds.

The number of persons successfully vaccinated in 1903-4 was 7,300, or 40·1 per 1,000 of the total population. Vaccination is compulsory only in the municipalities and cantonments.

[G. R. C. Williams, *Memoir of Dehra Dūn* (1874); F. Baker, *Settlement Report* (1886).]

Dehra Tahsīl.—*Tahsīl* in Dehra Dūn District, United Provinces, lying between 29° 57′ and 30° 32′ N. and 77° 35′ and 78° 18′ E., with an area of 731 square miles. It is divided into two *parganas*, called the Eastern and Western Dūns, and includes the whole of the valley between the Himālayas and Siwāliks from the Jumna to the Ganges, stretching up to the crest of the Siwāliks on the south and the outer range of the Himālayas on the north. The population rose from 117,438 in 1891 to 127,094 in 1901. It contains four towns, DEHRA (population, 28,095), the District and *tahsīl* head-quarters, MUSSOORIE, with the adjoining cantonment of LANDOUR (6,461), and RĀJPUR (2,900); and 377 villages. In 1903-4 the demand for land revenue was Rs. 69,000, and for cesses Rs. 13,000. The population is sparse, 174 persons per square mile, as there is a large forest area, the area under cultivation being only 122 square miles, of which 35 are irrigated. There are fifteen large tea gardens in the *tahsīl*, besides a number of smaller estates.

Dehra Town.—Head-quarters of the District and *tahsīl* of the same name in the United Provinces, situated in 30° 19′ N. and 78° 2′ E., at an elevation of 2,300 feet above the sea. It is the terminus of the Hardwār-Dehra (Company) Railway, which meets a branch of the Oudh and Rohilkhand, and it also lies on the main road from the plains to the hill station of Mussoorie. The population, including both municipality and cantonment, has increased from 7,316 in 1872 to 18,959 in 1881, 25,684 in 1891, and 28,095 in 1901. In 1901 Hindus numbered 18,246, Muhammadans 8,047, and Christians 1,100, most of whom were Europeans.

The town was founded by Gurū Rām Rai, the originator of the Udāsī sect of ascetics, early in the eighteenth century, after his failure to obtain the recognition of his claim to be made Gurū of the Sikhs. The temple of the Gurū, built in 1699, consists of a central block, designed on the model of the emperor Jahāngīr's tomb, in which the Gurū's bed is still preserved, and smaller monuments at the corners in memory of his wives. These are of brick, plastered over and pointed. The plaster of the large outer gateway has recently been adorned with paintings, which present a curious mixture of religious and historical subjects and portraits, including one of a former Superintendent of the Dūn. These are the work of a self-taught local mason and are of fair artistic merit.

Three reservoirs, one being 230 feet long and 184 feet wide, are attached to the temple.

Dehra is the cold-season head-quarters of the District staff, most of the members of which in the hot season spend part of each month at Mussoorie. An Assistant Superintendent is permanently posted here. It is also the head-quarters of the Trigonometrical and Forest Surveys of India, and of the Agricultural Chemist and Mycologist to the Government of India. The finest public building is the Forest School, which contains a magnificent collection of forest products and models of mechanical devices used in forestry, besides a natural history museum. The Director and a staff of professors train the students, and the school supplies subordinate forest officials to all parts of India. An institute for research into all matters relating to sylviculture and the administration and exploiting of forests is now being organized in connexion with the school. The members of the Imperial Cadet Corps reside at Dehra during their period of training, and in the hot season the Viceroy's body guard and private stables are kept here. The ex-Amīr of Afghānistān has a house at Dehra, and the former minister of Nepāl lives at Jharīpānī.

The municipality, which was established in 1867, had a population of 24,039 in 1901, and the receipts and expenditure from 1891 to 1901 averaged Rs. 28,000 and Rs. 33,000. A loan of Rs. 91,000 for water-works, made in 1895–6, is excluded from the receipts. In 1903–4 the figures were Rs. 59,000 and Rs. 55,000. The greater part of the income is obtained from octroi (Rs. 41,000), which has recently been imposed in place of a house tax. The water-supply is derived partly from Kolūkhet in the Himālayas by means of a pipe several miles long, and partly from Nālāpāni on the KALANGA hill. An increase in the supply is under consideration, while a complete system of surface drainage is being constructed.

There are no manufactures in Dehra, and the population chiefly depends on the position of the town as a dépôt for the trade with the hills, and as the head-quarters of the District. In 1904 Dehra contained 13 schools with 1,100 pupils.

The cantonment is the head-quarters of two battalions of Gurkhas, and has a total population of 4,056. In 1903–4 the income of the cantonment fund was Rs. 2,300, and the expenditure Rs. 1,500.

Dehrī.—Village in the Sasarām subdivision of Shāhābād District, Bengal, situated in 24° 55′ N. and 84° 11′ E., on the west bank of the Son, where it is crossed by the grand trunk road and the Mughal Sarai-Gayā section of the East Indian Railway. Population (1901), 4,296. It is important as the site of the head-works of the SON CANALS system.

Delath.—A petty State feudatory to the Bashahr State, Punjab, the

capital of which lies in 31° 20′ N. and 77° 36′ E. The area is 42 square miles, the population (1901) 1,489, and the revenue about Rs. 550. The present Thākur is Narindar Singh, a Hindu Rājput. He has full powers, but sentences of death require the confirmation of the Superintendent, Hill States, Simla. The tribute paid to Bashahr is Rs. 150.

Delhi Division (*Dehlī* or *Dillī*).—The south-eastern Division of the Punjab, stretching along the western bank of the Jumna, between 27° 39′ and 31° 18′ N. and 74° 29′ and 77° 40′ E. The Commissioner's head-quarters are at the city of Delhi, or at Simla during part of the hot season. The total population increased from 4,232,449 in 1881 to 4,434,751 in 1891, and to 4,587,092 in 1901. The area is 15,395 square miles, and the density of population 298 persons per square mile, compared with 209 for the Province as a whole. In 1901 Hindus numbered 3,252,428, or 71 per cent. of the total; Muhammadans, 1,192,331; Sikhs, 100,040; Jains, 30,110; Pārsīs, 65; and Christians, 12,108, of whom 3,909 were natives.

The Division includes seven Districts, as shown below:—

District.	Area in square miles.	Population, 1901.	Land revenue and cesses, 1903-4, in thousands of rupees.
Hissār	5,217	781,717	9,91
Rohtak	1,797	630,672	11,45
Gurgaon	1,984	746,208	14,39
Delhi	1,290	689,039	10,19
Karnāl	3,153	883,225	12,29
Ambāla	1,851	815,880	13,81
Simla	101	40,351	21
Total	15,393	4,587,092	72,25

With the exception of the small District of Simla and the hill station of Kasauli in Ambāla, the Division lies wholly in the plains. It contains 6,486 villages and 51 towns, the largest of which are DELHI (population, 208,575), AMBĀLA (78,638), BHIWĀNI (35,917), REWĀRI (27,295), PĀNĪPAT (26,914), KARNĀL (23,559), and ROHTAK (20,323). The Commissioner has political control over the Native States of Sirmūr, Kalsia, Pataudi, Dujāna, and Lohāru, which have an aggregate area of 1,740 square miles and a population of 264,204. Excepting Delhi, there are few towns of commercial importance, but Rewāri and Ambāla may be mentioned. Pānīpat in Karnāl District has been the scene of several famous battles. SIMLA, the seat of the Supreme Government for seven months in the year, lies within this Division.

Delhi District (*Dehlī* or *Dillī*).—District in the Delhi Division of

the Punjab, lying between 28° 12′ and 29° 14′ N. and 76° 48′ and 77° 31′ E., with an area of 1,290 square miles. The name should be written Dillī or Dhilī, and is said to be derived from an eponymous Rājā Dilu or Dhilu. The District is bounded on the north by Karnāl; on the east by the river Jumna, which separates it from the Districts of Meerut and Bulandshahr in the United Provinces; on the south by Gurgaon; and on the west by Rohtak. The northern portion, like most of the alluvial plains of Upper India, is divided into the *khādar*, or riverain, a strip of land adjoining the Jumna; and the drier and more sandy uplands, known as the *bāngar*. Though monotonous in appearance, this latter tract is well wooded, and, being traversed by the Western Jumna Canal, is fertile in the extreme. A prolongation of the Arāvalli Hills enters Delhi from Gurgaon on the southern border, and immediately expands into a rocky table-land, about three miles in breadth, running in a north-easterly direction nearly across the District. Ten miles south of the city the range divides into two branches, one of which, turning sharply to the south-west, re-enters the borders of Gurgaon; while the other, continuing its northerly course as a low, narrow range of sandstone, passes west of Delhi city, where it forms the historic Ridge, and finally terminates on the right bank of the Jumna. The table-land nowhere attains an elevation of more than 500 feet above the lowlands at its base; but its surface consists of barren rock, too destitute of water for the possibility of cultivation, even in the few rare patches of level soil. The Jumna, before reaching the borders of the District, has been so completely drained of its waters for the two older canals which it feeds, that it forms only a narrow stream, fordable at almost any point, except during the rains.

Physical aspects.

The greater part of the District lies on the alluvium; but the small hills and ridges, which abound to the south of Delhi, consist of outliers of Alwar quartzite belonging to the Delhi system of the transition group of Peninsular India. The Ridge at Delhi is composed of the same rock.

The natural vegetation is that of the drier parts of the Upper Gangetic plain, with an element akin to that of North-East Rājputāna, while traces of an ancient Deccan flora are found on and near the low spur which ends in the ridge at Delhi. The mango and other sub-tropical species are cultivated in gardens and along canals and road-sides; but large trees, except where planted, are comparatively scarce, and the kinds that reproduce themselves spontaneously are probably, in most cases, not natives of the District.

Wolves are not uncommon and leopards are occasionally met with. Hog are plentiful all along the banks of the Jumna. Antelope are becoming scarce, while *nīlgai* and hog deer are practically extinct. 'Ravine deer' (Indian gazelle) are found in the low hills.

The cold season is much like that of the Punjab proper, but ends a fortnight sooner than at Lahore. Hot west winds blow steadily till the end of June, when plentiful rain is expected. October brings cool nights and the beginning of the feverish season, which is always very unhealthy. The average mean temperature of January is 57°, of April 85°, of June 97°, and of September 87°.

The annual rainfall varies from 21½ inches at Ballabgarh to 28 at Delhi. Of the rainfall at the latter place 25 inches fall in the summer months, and 3 in the winter. The greatest rainfall recorded during the twenty years ending 1901 was 48 inches at Delhi in 1884–5, and the least one-fifth of an inch at Mahrauli in 1896–7.

History.

The history of the District is the history of DELHI CITY, of which it has from time immemorial formed a dependency. Even the towns of SONEPAT, BALLABGARH, and FARĪDĀBAD hardly possess local histories of their own, apart from the city, in or around which are all its great antiquities.

The tract conquered by the East India Company in 1803 included a considerable strip to the west of the Jumna both north and south of the Mughal capital. A few native princes, however, still held independent estates within the Delhi territory, the principal in the present District being the Rājā of Ballabgarh. As early as 1819 a District of Delhi was regularly constituted. It included a part of the present Rohtak District; and in 1832 the administration of the Delhi territory, nominally as well as actually, was placed in the hands of the East India Company. The territory continued to form part of the North-Western (now the United) Provinces till the Mutiny of 1857.

On the outbreak of the Mutiny the whole District passed into the hands of the rebels; and though communications with the Punjab were soon restored, and the northern *parganas* recovered, it was not till after the fall of Delhi city that British authority could reassert itself in the southern portion. When the final suppression of the Mutiny enabled the work of reconstruction to proceed, the District was transferred to the Punjab. At the same time the territories of the insurgent Rājā of Ballabgarh, who had been executed for rebellion, were confiscated and added as a new *tahsīl* to the District; while the outlying villages of the Doāb, hitherto belonging to Delhi, and known as the eastern *pargana*, were handed over to the North-Western Provinces.

Population.

The District contains 4 towns and 714 villages. The population at the last three enumerations was: (1881) 643,515, (1891) 638,689, and (1901) 689,039. It increased by 7·8 per cent. during the last decade, the increase being greatest in the Delhi *tahsīl* (8·9) and least in Ballabgarh (5·9). It is divided into the three *tahsīls* of DELHI, SONEPAT, and BALLABGARH, the head-quarters of each being at the place from which it is named. The chief towns

are the municipalities of DELHI, the head-quarters of the District, SONEPAT, BALLABGARH, and FARĪDĀBĀD. The following table shows the chief statistics of population in 1901:—

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Delhi . .	429	1	243	359,008	836.8	+ 8.9	21,854
Sonepat . .	455	1	224	203,338	446.9	+ 7.3	6,445
Ballabgarh .	385	2	247	126,693	329.1	+ 5.9	3,271
District total	1,290	4	714	689,039	534.1	+ 7.8	31,570

NOTE.—The figures for the areas of *tahsīls* are taken from revenue returns. The total District area is that given in the *Census Report*.

Hindus number 510,532, or more than 74 per cent. of the total; Muhammadans, 167,290; and Jains, 7,726. The people of Delhi city share with Lucknow the reputation of speaking the most elegant form of Hindustāni or Urdū.

The Jāts are the chief landowning tribe, numbering 114,000, and are almost entirely Hindus. Those of the south of the District centre about Ballabgarh, and their traditions are connected with the Jāt Rājās of that place. Those of the north are divided into two factions: the Dahiyas, who trace their descent from a grandson of Prithwī Rāj, Dhanij by name, and a Jāt woman; and the Ahūlānas, who say that their ancestors came from Rājputāna. The Gūjars (28,000) are nearly all Hindus; they have a bad reputation as thieves, and levy a kind of blackmail on the residents of the civil station by ensuring that the rash householder who does not employ a Gūjar watchman shall infallibly have his house robbed. The Tagās (9,000) say that they were once Brāhmans, and derive their name from the fact of their having abandoned (*tyāga*) the practice of mendicancy. They are of the Gaur family, and their tradition is that they were invited from Bengal for the purpose of exterminating snakes. Sir H. Elliot finds in this story an allusion to wars against 'Takshaka Scythians' of a Buddhist creed. The Ahīrs (14,000) are all Hindus and claim a Rājput origin. They are excellent cultivators. The Rājputs (24,000) are mostly Hindus, but 4,000 are Muhammadans. The District contains 62,000 Brāhmans, 71,000 Shaikhs, and 8,000 Meos. The Baniās (47,000) are the most important of the commercial classes, but there are 5,000 Khattrīs. Of the menials may be mentioned the Chamārs or leather-workers (66,000), the Chūhrās (27,000) and Dhānaks (6,000) who are scavengers, the Jhīnwars or water-carriers (17,000), the Kumhārs or potters (14,000), the Lohārs or blacksmiths (6,000), the Nais or barbers (11,000), the

Kassābs or butchers (6,000), and the Tarkhāns or carpenters (9,000). As is natural in a District containing so large a city, only 41 per cent. of the total population are supported by agriculture, while 29 per cent. are industrial, 6 commercial, and 3 professional.

The Society for the Propagation of the Gospel was established at Delhi in 1854, and reinforced in 1877 by the Cambridge Mission—a body of graduates of Cambridge living and working together as a brotherhood—who, with the original body, form one mission under the name of the S. P. G. and Cambridge Mission in Delhi and the South Punjab. Among the institutions managed by this united body are St. Stephen's Mission College, a high school, with six branches and 700 boys, and other schools, a hospital for women, a Christian girls' boarding school and industrial school, and St. Mary's Home for convalescent converts and teachers. The first Baptist missionary in Delhi was John Chamberlain, tutor to the son of Begam Sumrū, who visited the city in 1814; but Delhi was not recognized as a mission station till 1818. In the operations of the Baptist Mission are included a training institution, a dispensary, a school, a Zanāna mission, and a girls' school. Of every 10,000 persons in the District 46 are Christians. In 1901 the total number of native Christians was 2,042.

Agriculture.

North of the city the District is divided into two portions: the low-lying riverain *khādar* near the Jumna, and the higher upland, or *bāngar*, now removed from the influence of the river. In the *khādar*, where the soil is light and sandy, irrigation from wells is easy, and this tract mainly depends on the spring harvest. The *bāngar* is traversed by the Western Jumna Canal and, until the recent realignment, suffered severely from swamping; in its unirrigated portions the autumn harvest is naturally the more important, and south of Delhi the riverain strip is very narrow. In the lands lying just under the hills, the soil is light, and irrigation is chiefly carried on by dams which hold up the mountain torrents. Round the Najafgarh *jhīl* and in the extreme south are blocks of land, inundated in the rains, with a light soil and water near the surface. Since the Najafgarh *jhīl* was drained, cultivation on its borders has ceased to be as profitable as formerly.

The District is held almost entirely by petty peasant proprietors, large estates covering only 50,000 acres, and about 16,000 acres owned by Government being held on temporary leases. The area for which details are available from the revenue records of 1903–4 is 1,284 square miles, as shown in the table on the next page.

The chief crops in the spring harvest are gram and wheat, which occupied 36 and 159 square miles respectively in 1903–4; barley occupied 47 square miles. In the autumn harvest spiked millet occupied 133 and great millet 114 square miles, these being the staple food-

grains of the District. Next in importance are cotton (37 square miles), sugar-cane (25 square miles), and maize (15 square miles). Sugar-cane is the most important and profitable crop of the autumn in the *bāngar* tracts of Delhi and Sonepat; melons are an important crop of the extra spring harvest on the river-side near the city.

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Delhi . . .	429	294	101	71
Sonepat . .	460	323	194	82
Ballabgarh . .	395	250	27	41
Total	1,284	867	322	194

The cultivated area increased from 821 square miles in 1881 to 867 in 1904, or by slightly more than 5 per cent., and there is little room for further extension. The character of the cultivation has, however, been enormously improved by the remodelling of the WESTERN JUMNA CANAL, which has caused the saline efflorescences and waterlogging, once characteristic of the canal-irrigated tracts, to disappear in great measure. The draining of the Najafgarh *jhīl* has also added to the cultivated area, besides vastly improving the physical well-being of the people. A good deal has been done in the way of encouraging the people to take advances for the construction of wells, and 1·2 lakhs was advanced under the Land Improvement Loans Act during the five years ending 1904.

Cattle form an important feature of agricultural economy, and few Jāts do not own a yoke of bullocks and a cow or buffalo; but the breeds are in no way peculiar. A horse fair is held at Delhi city, but the District does not produce anything beyond the ordinary village pony. The District board maintains one donkey and two horse stallions.

Of the total area cultivated in 1903–4, 322 square miles, or 37 per cent., were classed as irrigated. Of this area, 161 square miles were irrigated from wells alone, 941 acres from wells and canals, and 159 square miles from canals alone. The new Delhi branch of the Western Jumna Canal, which traverses Sonepat and the northern part of the Delhi *tahsīl*, is estimated to irrigate 129 square miles yearly. When the canal was reopened under British rule, it was aligned for a great part of its length in a valley, and the watercourses were equally ill constructed, often intersecting one another and running side by side for long distances. The result was that almost irretrievable damage was done by waterlogging and saline efflorescences, and the health of the people was seriously impaired. Since 1880, however, the distributing system has been entirely remodelled and about 386 miles of

drainage channels constructed. The result has been most encouraging and waterlogging with its attendant evils has almost entirely disappeared. A small area is irrigated by the Najafgarh canal, an escape which drains the Najafgarh *jhīl* and is now in charge of the District board. The Agra Canal takes off from the Jumna below Delhi city, but flows at too low a level to give much irrigation in this District.

The District contains 9,943 wells, besides 1,279 temporary wells, lever wells, and water-lifts. The Persian wheel is the commonest method of raising water in the north, and the rope and bucket in the south and centre. As there is no scope for the extension of canal-irrigation, the chief means of protection against famine is afforded by the construction of new wells.

The only forests are 35·9 square miles of 'unclassed' forests and Government waste under the control of the Deputy-Commissioner.

Chalk is obtained in small quantities from two villages, where it is dug out of a rude mine, made by sinking a shaft 30 or 40 feet deep, and driving horizontal tunnels. The output is about 15,000 maunds annually. The work is done by menial castes, who get 2½ annas a day for work below, and 1½ or 2 annas for work on the surface. *Kankar* is quarried in about 125 villages, and a quartz-like building stone is also found. A crystal mine, formerly worked at Arangpur, has long been abandoned. A certain amount of crude saltpetre is manufactured; and a saltpetre refinery in Delhi city turns out about 2,500 maunds annually.

Trade and communications.

The District possesses no arts or manufactures of any importance except those of the city. Similarly the commerce of the region all centres in the city, that of the rest of the District consisting merely in the interchange of agricultural produce for piece-goods, iron, and other necessaries. Of the twenty-four factories in the District, which in 1904 employed 3,494 hands, all are in the city except a cotton-ginning and pressing factory at Sonepat, where the number of hands employed in 1904 was 130.

Delhi is in connexion with six railway systems. The East Indian, North-Western, and Oudh and Rohilkhand Railways enter it from Ghāziābād junction, crossing the Jumna by an iron bridge. The Delhi-Ambāla-Kālka Railway runs northwards from the city, and the Rājputāna-Mālwā Railway traverses the District for a short distance in the direction of Gurgaon. A line from Delhi to Agra was opened in 1904. The Jumna is navigable during the rainy season, and the Western Jumna Canal, continued as far as Delhi by the Okhla Navigation Canal, is navigable all the year round. Good metalled roads connect the city with Lahore, Agra, Jaipur, and Hissār; while a network of local trade-lines runs in every direction to the various minor

towns. The District has altogether 143 miles of metalled and 499 of unmetalled roads, all of which, except 104 miles of metalled and 83 of unmetalled roads under the Public Works department, are maintained by the District board. The Jumna is crossed by four ferries, and the railway bridge at Delhi has a subway for ordinary wheeled traffic.

Famine.

The history of famine goes back to the year 1345 in the time of Muhammad bin Tughlak, when it is recorded that men ate one another. Subsequent famines occurred in 1631, in the time of Shāh Jahān; in 1661, under Aurangzeb, a severe famine; in 1739, under Muhammad Shāh, famine followed the invasion by Nādir Shāh; and again in 1770, 1783–4, 1803–4, 1813–4, and in 1825–6, when the Sonepat *tahsīl* was severely affected and the entire revenue was remitted. In 1832–4 and 1837–8 bread riots occurred, and unlimited relief was offered to those who would work. The famine of 1860–1 was severe, and 2·7 lakhs was expended on relief works and gratuitous relief, representing a total number of 12,000 persons relieved for a whole year. The famine of 1865 was not severe in Delhi. In the famine of 1868–9 relief works were provided, and altogether Rs. 14,000 was expended, including Rs. 9,000 from private subscriptions. The famine of 1877–8 did not materially affect Delhi. In 1896–7 there was considerable distress; wheat and *bājra* sold at 7¾ and 8½ seers per rupee respectively, and more than 3,000 persons were employed on relief works, and about 4,000 received food at kitchens. Scarcity again supervened in 1899–1900, but in spite of unfavourable local conditions the people did not resort to the main relief work provided. The District is small; it contains a large city centrally situated, and there is at all times a demand for labour. The greatest daily average of persons relieved in 1899–1900 was 4,374; Rs. 40,694 were spent in wages on earthwork, and the cost incurred by the municipality was Rs. 5,699.

Administration.

The District is in charge of a Deputy-Commissioner, aided by five Assistant or Extra-Assistant Commissioners, of whom one is in charge of the District treasury. The treasury here is the Bank of Bengal, and there is a currency dépôt at the courthouse. The District is divided into three *tahsīls*, each under a *tahsīldār* and a *naib-tahsīldār*. Delhi city is also the head-quarters of the Superintending Engineer, Western Jumna Canal circle, and of the Executive Engineer, Delhi Provincial division.

Civil judicial work is under a District Judge, from whom appeals lie to the Divisional Judge of the Delhi Civil Division. He is aided by an Extra-Assistant Commissioner (who is solely employed on civil judicial work and may be replaced by a Munsif), a Small Cause Court Judge, and one Munsif, besides whom the other Assistant and Extra-

Assistant Commissioners and the *tahsīldārs* help in civil judicial work. There is an honorary Extra-Assistant Commissioner at head-quarters. The civil work, arising mainly out of the large and growing trade of the city, is very heavy. The Divisional Judge is also Sessions Judge of the Delhi Civil Division. There are sixteen honorary magistrates, of whom twelve constitute a bench for the city, two sit at head-quarters, and one in each *tahsīl*. The predominant forms of crime are burglary and theft.

The only peculiarity as regards tenure of land is that in a few villages superior and inferior proprietors are found; the settlement is (with one exception) made with the latter, the superior proprietors merely receiving a charge of 5 to 10 per cent. on the revenue. The nature of the early revenue assessments appears to have been very summary. They were made, as far as possible, on the basis of previous arrangements, and were for short terms only. The administration, from annexation to 1841, was harsh and unsympathetic. The Sonepat and Delhi *tahsīls* were regularly settled in 1842 and 1844, and Ballabgarh after its confiscation in 1857. The Settlement officer in 1842 reduced the demand in Sonepat, and excused himself for so doing by pointing out that the greatest difficulty had been invariably experienced in realizing the Government demand; that, notwithstanding strenuous and well-sustained efforts, the District officers and their subordinates had been baffled, and that large balances had frequently remained uncollected. Reductions were made in all *tahsīls* at the regular settlement. The settlement of the whole District was revised between 1872 and 1880. The revenue rates on land irrigated from wells varied from Rs. 4 to 8 annas, on flooded land from Rs. 2–8 to Rs. 2, and on unirrigated land from Rs. 1–10 to 10 annas. Canal lands were assessed at 'dry' rates of about Rs. 1–8, Rs. 3 being paid as occupier's rate for the use of the water, plus an extra Rs. 1–8 as owner's rate. Villages on the Najafgarh *jhīl* were charged a fluctuating assessment on the area cultivated, varying from Rs. 6 to Rs. 1–8 according to the nature of the crop. The new assessment resulted in an increase of Rs. 45,000. A change was made in 1895 in the method of realizing canal revenue, and the system then adopted remains in force. The land revenue demand in 1903–4, including cesses, was 10 lakhs. The average size of a proprietary holding is 3 acres.

The collections of land revenue alone and of total revenue are shown below, in thousands of rupees:—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	8,60	8,12	7,68	8,06
Total revenue .	11,57	11,94	15,10	16,21

The District contains four municipalities, DELHI, SONEPAT, BALLABGARH, and FARĪDĀBĀD; and two 'notified areas,' Mahrauli and Najafgarh. Outside these, local affairs are managed by the District board, whose income amounted in 1903–4 to a lakh. The expenditure in the same year was also a lakh, of which a fifth was devoted to education.

The regular police force consists of 1,023 of all ranks, including 539 municipal police, under a Superintendent, who usually has one Assistant and one Deputy-Superintendent (in charge of the city) and six inspectors under him. Village watchmen number 924. There are 14 police stations, of which 3 are in the city, 8 outposts, and 10 road-posts. The District jail in the city has accommodation for 536 prisoners.

Delhi stands fifth among the twenty-eight Districts of the Province in respect of the literacy of its population. In 1901 the proportion of literate persons was 4·6 per cent. (8 males and 0·6 females). The number of pupils under instruction was 5,210 in 1880–1, 8,124 in 1890–1, 9,525 in 1900–1, and 10,644 in 1903–4. In the last year the District had 2 Arts colleges, 14 secondary, 110 primary, one training, and 3 special (public) schools, and 12 advanced and 123 elementary (private) schools, with 570 girls in the public and 277 in the private schools. The total expenditure on education in 1903–4 was 2 lakhs, of which Rs. 19,000 was derived from District funds, Rs. 18,000 from municipalities, and Rs. 73,000 from Provincial funds.

The public medical institutions are the municipal Dufferin Hospital and two dispensaries in the city, and 6 outlying dispensaries. In 1904 these treated a total of 131,050 out-patients and 2,299 in-patients, and 5,975 operations were performed. The total expenditure was Rs. 30,000, the greater part of which was met from municipal and District funds. Besides the institutions mentioned above, the city possesses the St. Stephen's Hospital (Cambridge Mission) for women and the Baptist dispensary. The Victoria Memorial Zanāna Hospital, erected at a cost of one lakh, was opened in December, 1906.

The number of successful vaccinations in 1903–4 was 27,280, representing 39·7 per 1,000 of the population. Vaccination is compulsory only in Delhi city and Sonepat town.

[D. C. J. Ibbetson, *District Gazetteer* (1883–4); R. Maconachie, *Settlement Report* (1882).]

Delhi Tahsīl.—Central *tahsīl* of Delhi District, Punjab, lying between 28° 30′ and 28° 53′ N. and 76° 51′ and 77° 17′ E., to the west of the river Jumna, with an area of 429 square miles. The population in 1901 was 359,008, compared with 329,547 in 1891. The headquarters are at DELHI CITY (population, 208,575), and there are also 243 villages. The land revenue and cesses amounted in 1903–4 to 3·4 lakhs. The eastern portion of the *tahsīl* lies in the Jumna lowlands. From the city southwards stretches a line of low quartzite hills, while

the south-west corner is occupied by the Najafgarh *jhīl*. The rest of the *tahsīl* consists of a fertile upland plain, poorly wooded and with a light rainfall, but for the most part irrigated by the Western Jumna Canal.

Delhi City (*Dehlī* or *Dillī*).—Head-quarters of the Delhi Division, District, and *tahsīl*, Punjab, and former capital of the Mughal empire, situated in 28° 39′ N. and 77° 15′ E., on the west bank of the Jumna; distant from Calcutta 956 miles, from Bombay 982 miles, and from Karāchi 907 miles. The population at the last three enumerations was: (1881) 173,393, (1891) 192,579, and (1901) 208,575. The increase during the last decade is greatly due to the development of mill industries. The population in 1901 included 114,417 Hindus, 88,460 Muhammadans, 3,266 Jains, 2,164 Christians, and 229 Sikhs.

Population.

The area close to where the northernmost spur of the Arāvalli Hills abuts on the Jumna has from remote times been the site of one great city after another. First of these is the city of Indraprastha, founded, according to the tradition preserved in the Mahābhārata, by the Pāndava chief Yudhishthira. Indraprastha was, however, only one of the five *prasthas* or 'plains,' which included Sonepat, Pānīpat, Pilpat, and Bāghpat. Firishta has recorded a tradition that Delhi or Dillī was founded by a Rājā Dhilū before the Macedonian invasion; but as an historical city Delhi dates only from the middle of the eleventh century A.D., when Anang Pāl, a Rājput chief of the Tomar clan, built the Red Fort, in which the Kutb Minār now stands, and founded a town. He also removed the famous iron pillar on which are inscribed the eulogies of Chandra Gupta Vikramāditya, probably from Muttra, and set it up in 1052 as an adjunct to a group of temples. This remarkable relic consists of a solid shaft of metal 16 inches in diameter and about 23 feet in height, set in masonry, 3 feet of it being below the surface. Tradition indeed asserts that a holy Brāhman assured the Rājā that the pillar had been driven so deeply into the earth that it reached the head of Vāsuki, the serpent king who supports the world, and, consequently, had become immovable, whereby the dominion was ensured for ever to the dynasty of its founder. The incredulous Rājā ordered the monument to be dug up, when its base was found reddened with the blood of the serpent king. Thus convinced, Anang Pāl at once commanded that the shaft should be sunk again in the earth; but as a punishment for his want of faith, it appeared that no force could restore it to its place as before. Hence the city derived its name Dhilī, from the fact that the column remained loose (*dhīla*) in the ground. Unfortunately for the legend, not only does the inscription prove its falsity, but the name of Dillī is undoubtedly earlier than the rise of the Tomar dynasty.

History.

Anang Pāl, who seems to have come from Kanauj, ruled a petty principality extending to Hānsi on the north, the Ganges on the east, and Agra on the south. His dynasty lasted just a century, until 1151, when it was supplanted by Vīsaldev or Bīsaldeo, a Chauhān chief of Ajmer. Bīsaldeo's grandson, the famous Prithwī Rāj or Rai Pithora, ruled both Delhi and Ajmer, and built the city which bore his name at the former place. The walls of this city may still be traced for a long distance round the Kutb Minār. From Delhi Rai Pithora in 1191 led his Hindu vassals and allies to defeat Muhammad of Ghor at TIRĀWARI, but in the following year he met with a decisive overthrow at that place. With his death the history of Hindu Delhi ends. In 1193 Kutb-ud-dīn, Muhammad's slave general, took Delhi; and on his master's death in 1206 it became the capital of the Slave dynasty to whom Old Delhi owes its grandest ruins. Kutb-ud-dīn's mosque was commenced, according to the inscription on its entrance archway, immediately after the capture of the city in 1193. It was completed in three years, and enlarged during the reign of Altamsh, son-in-law of the founder, and the greatest monarch of the line. This mosque consists of an outer and inner courtyard, the latter surrounded by an exquisite colonnade, whose richly decorated shafts have been torn from the precincts of Hindu temples. Originally a thick coat of plaster concealed from the believer's eyes the profuse idolatrous ornamentations; but the stucco has now fallen away, revealing the delicate workmanship of the Hindu artists in all its pristine beauty. Eleven magnificent arches close its western façade, Muhammadan in outline and design, but carried out in detail by Hindu workmen, as the intricate lace-work which covers every portion of the arcade sufficiently bears witness. Ibn Batūta, the Moorish traveller, who was a magistrate in Delhi and saw the mosque about 150 years after its erection, describes it as unequalled for either beauty or extent. The Kutb Minār, another celebrated monument of the great Slave king, stands in the south-east corner of the outer courtyard of the mosque. It rises to a height of 238 feet, tapering gracefully from a diameter of 47 feet at the base to nearly 9 feet at the summit. The shaft consists of five storeys, enclosing a spiral staircase, and was crowned by a now broken cupola, which fell during an earthquake in 1803. The original purpose of the minaret was doubtless as a *muazzin's* tower, whence the call to morning and evening prayer might be heard throughout the whole city. The site chosen for the mosque was that already occupied by the iron pillar, which forms the central ornament of the inner courtyard. Around in every direction spreads a heap of splendid ruins, the most important of which are the tomb of Altamsh and the unfinished minaret of Alā-ud-dīn, commenced in 1311.

During the reign of the Slave kings, a queen, for the only time in its

history, sat on the throne of the Muhammadan empire of Delhi. As the patriot Hungarians, in the annals of modern Europe, drew their swords for *Rex* Maria Theresa, so her subjects gave to queen Raziya the masculine title of *Sultān*.

The Slave dynasty retained the sovereignty till 1290, when Jalāl-ud-dīn, Khiljī, founded a new line. During the reign of his nephew and successor, Alā-ud-dīn, Delhi was twice unsuccessfully attacked by Mongol hordes, who swept into the country from Central Asia.

In 1321 the house of Tughlak succeeded to the empire; and Ghiyās-ud-dīn, its founder, erected a new capital, Tughlakābād, on a rocky eminence some four miles farther to the east. Remains of a massive citadel, and deserted streets or lanes, still mark the spot on which this third metropolis arose; but no human inhabitants now frequent the vast and desolate ruins. Ghiyās-ud-dīn died in 1325, and was succeeded by his son Muhammad bin Tughlak, who thrice attempted to remove the seat of government and the whole population from Delhi to Daulatābād in the Deccan, more than 800 miles away. Ibn Batūta gives a graphic picture of the desolate city, with its magnificent architectural works, and its bare, unpeopled houses. Fīroz Shāh Tughlak once more removed the site of Delhi to a new town, Fīrozābād, which appears to have occupied all the ground between the tomb of Humāyūn and the Ridge. Amid the ruins of this prince's palace, just outside the modern south gate, stands one of the famous pillars originally erected by Asoka, in the third century B.C. This monolith, 42 feet in height, is known as Fīroz Shāh's *lāt* or pillar, as it was brought by him from Topra near Khizrābād in the District of Ambāla. It is composed of pale pink sandstone, and bears a Pāli inscription, first deciphered by Mr. Prinsep.

In December, 1398, while rival claimants of the house of Tughlak were fighting for the remnants of the kingdom, the hordes of Tīmūr reached Delhi. Mahmūd Shāh II, the nominal king, fled to Gujarāt, after his army had suffered a defeat beneath the walls; and Tīmūr, entering the city, gave it over for five days to plunder and massacre. Dead bodies choked the streets; and when at last even the Mongol appetite for carnage was satiated, the host retired, dragging with them into slavery large numbers of both men and women. For two months Delhi remained absolutely without government, until Mahmūd Shāh recovered a miserable fragment of his former empire. In 1412 he died; and his successors, the Saiyid vassals of the Mongols, held Delhi, with a petty principality in the neighbourhood, until 1450, when the Lodī dynasty succeeded to the Muhammadan empire. In 1503 Sikandar II made Agra the capital of the empire, but Delhi retained much of its former importance. After his defeat of Ibrāhīm II, the last of the Lodīs, at Pānīpat, Bābar entered Delhi in 1526, but resided

mainly at Agra. Humāyūn removed to Delhi, and built or restored the fort of Purāna Kila on the site of Indraprastha. The Afghān Sher Shāh, who drove out Humāyūn in 1540, enclosed and fortified the city with a new wall. One of his approaches, known as the Lāl Darwāza or 'red gate,' still stands isolated on the roadside, facing the modern jail. The fortress of Salīmgarh preserves the name of a son of Sher Shāh. Humāyūn's tomb forms one of the most striking architectural monuments in the neighbourhood. Akbar and Jahāngīr usually resided at Agra, Lahore, or Ajmer. Shāh Jahān rebuilt the city on its present site, surrounding it with the existing fortifications and adding the title of Shāhjahānābād from his own name. He also built the Jāma Masjid, and reopened the Western Jumna Canal. From his time, except for brief periods, Delhi remained the head-quarters of the Mughal emperors. In 1737, during the reign of Muhammad Shāh, Bāji Rao, the Marāthā Peshwā, appeared beneath its walls. Two years later, Nādir Shāh entered the city in triumph and re-enacted the massacre of Tīmūr. For 58 days the victorious Persian plundered rich and poor alike, and left the city with a booty estimated at nine millions sterling. Before the final disruption of the decaying empire in 1760, the unhappy capital was twice devastated by civil war, sacked by Ahmad Shāh Durrāni, and finally spoiled by the rapacious Marāthās. Alamgīr II, the last real emperor, was murdered in 1759. Shāh Alam, who assumed the empty title, could not establish his authority in Delhi, which became the alternate prey of Afghāns and Marāthās until 1771, when the latter party restored the emperor to the city of his ancestors. In 1788 a Marāthā garrison permanently occupied the palace, and Shāh Alam remained a prisoner in the hands of Sindhia until the British conquest. On March 14, 1803, Lord Lake, having defeated the Marāthās, entered Delhi, and took the emperor under his protection. Next year, Holkar attacked the city; but Colonel (afterwards Sir David) Ochterlony, first British Resident, successfully held out against overwhelming numbers for eight days, until relieved by Lord Lake. The conquered territory was administered by the British in the name of the emperor, while the palace remained under his jurisdiction.

The story of the Mutiny at Delhi and of the restoration of British sovereignty belongs to Indian rather than to local history. Delhi was recovered in September, 1857, and remained for a while under military government; and it became necessary, owing to the frequent murders of European soldiers, to expel the population for a while from the city. Shortly after, the Hindu inhabitants were freely readmitted; but the Muhammadans were still rigorously excluded, till the restoration of the city to the civil authorities on January 11, 1858.

Delhi has on two occasions since the Mutiny been the scene of Imperial assemblages: in 1877 when Queen Victoria was proclaimed

Empress of India, and in 1903 to celebrate the accession of Edward VII.

The modern city of Delhi extends for over 2 miles along the west bank of the river Jumna, and on the other three sides is enclosed by a lofty stone wall $3\frac{1}{4}$ miles in length, built by Shāh Jahān, and reconstructed by the British at the beginning of the last century. It was once entered by fourteen gates, eight on the land side and six leading to the river; but many of these have now been removed. Of those that remain, the principal are: on the north the Kashmīr Gate, on the west the Farāsh Khāna and Ajmer Gates, and on the south the Delhi Gate. The imperial palace, now known as the Fort, lies to the east of the city, and abuts directly on the river. It is surrounded on three sides by an imposing wall of red sandstone, with small round towers, and gateways on the west and south.

Description.

On the north-east of the Fort is the outwork of Salīmgarh. At this point the East Indian Railway enters the city by a magnificent bridge across the Jumna, passing over Salīmgarh and through a corner of the Fort to the railway station within the city walls. North-west of the Fort, up to the Kashmīr Gate, lies an open space in which are situated the public offices and St. James's Church. South of this and separated from it by the railway line lies another open space devoted to the public gardens; and in the south-east corner of the city, in the quarter known as Daryā Ganj, is the cantonment. The area thus occupied covers nearly one-half of the entire city; it presents a comparatively open appearance, and forms a marked contrast to the south-west quarter of the city, which is densely occupied by the shops and dwellings of the native population.

The architectural glories of Delhi are famous alike in Indian and European literature. It is impossible in a brief notice like the present to attempt any adequate description of them. They are described in Mr. Fergusson's *History of Indian and Eastern Architecture* (1876), in Mr. Fanshawe's *Delhi Past and Present* (1902), and in many other works. The palace of Shāh Jahān, perhaps less picturesque and more sober in tone than that of Agra, has the advantage of being built on a more uniform plan, and by the most magnificent of the royal builders of India. It forms a parallelogram, measuring 1,600 feet east and west by 3,202 feet north and south, exclusive of the gateways. Passing the deeply-recessed portal, a vaulted hall is entered, rising two storeys, 375 feet long, like the nave of a gigantic Gothic cathedral—'the noblest entrance,' says Mr. Fergusson, 'to any existing palace.' Facing this entrance is the Naubat Khāna or 'music hall,' and beyond is the great court of the palace, in the middle of which stands the Dīwān-i-ām or 'hall of public audience.' Behind this again is a court containing the

Rang Mahal or 'painted chamber.' North of this central range of buildings stands the Dīwān-i-khās or 'private audience hall,' which forms, 'if not the most beautiful, certainly the most ornamented of all Shāh Jahān's buildings.' It overhangs the river, and nothing can exceed the delicacy of its inlaid work or the poetry of its design. It is on the walls of this hall that the famous inscription runs, 'If there is a heaven on earth, it is this—it is this!' South of the central range of buildings an area, measuring about 1,000 feet each way, was occupied by the harem and private apartments of the palace, covering, consequently, more than twice the area of the Escurial, or, in fact, of any palace in Europe.

The buildings in the native city are chiefly of brick, well-built, and substantial. The smaller streets are narrow and tortuous, and in many cases end in *culs-de-sac*. On the other hand, no city in India has finer streets than the main thoroughfares of Delhi, ten in number, thoroughly drained, metalled, and lighted. The principal thoroughfare, the Chāndni Chauk, or 'silver street,' leads eastwards from the Fort to the Lahore Gate, three-quarters of a mile long by 74 feet broad. Throughout the greater part of its length, a double row of trees runs down its centre on both sides of a raised path, which has taken the place of the masonry aqueduct that in former days conducted water from the canal into the palace. A little to the south of the Chāndni Chauk is the Jāma Masjid, or 'great mosque,' standing out boldly from a small rocky rising ground. Begun by Shāh Jahān in the fourth year of his reign, and completed in the tenth, it still remains one of the finest buildings of its kind in India. The front courtyard, 450 feet square, surrounded by a cloister open on both sides, is paved with granite inlaid with marble, and commands a view of the whole city. The mosque itself, a splendid structure forming an oblong 261 feet in length, is approached by a magnificent flight of stone steps. Three domes of white marble rise from its roof, with two tall and graceful minarets at the corners in front. The interior of the mosque is paved throughout with white marble, and the walls and roof are lined with the same material. Two other mosques deserve a passing notice: the Kālī Masjid or 'black mosque,' so called from the dark colour given to it by time, and supposed to have been built by one of the early Afghān sovereigns; and the mosque of Roshan-ud-daula. Among the more modern buildings may be mentioned the Residency, now occupied by the Government high school; the Town Hall, a handsome building in the Chāndni Chauk, containing a Darbār hall with a good collection of pictures, a museum, and a public library; and the Church of St. James, built at a cost of £10,000 by Colonel Skinner, an officer well-known in the history of the East India Company. About half-way down the Chāndni Chauk is a high clock-tower. North of the Chāndni Chauk lie the Queen's

Gardens. Beyond the city walls the civil lines stretch away on the north as far as the historic Ridge, about a mile outside. To the west and south-west considerable suburbs cluster outside the walls, containing the tombs of the imperial family. That of Humāyūn is a noble building of red sandstone with a dome of marble. It lies about 3½ miles from the Delhi Gate in a large garden of terraces, the whole surrounded by an embattled wall, with towers and four gateways. In the centre stands a platform about 20 feet high by 200 feet square, supported by cloisters, and ascended by four great flights of granite steps. Above rises the mausoleum, also a square, with a great dome of white marble in the centre. About a mile to the westward is another burying-ground, or collection of tombs and small mosques, some of them very beautiful. The most remarkable is perhaps the little chapel in honour of a celebrated Muhammadan saint, Nizām-ud-dīn, near whose shrine the members of the Mughal imperial family, up to the time of the Mutiny, lie buried, each in his own little enclosure, surrounded by very elegant lattice-work of white marble.

The palaces of the nobles, which formerly gave an air of grandeur to the city, have for the most part disappeared. Their sites are occupied by structures of less pretension, but still with some elegance of architectural design. The city is now amply supplied with water; and much attention has of late been paid to cleanliness and sanitary requirements generally.

The municipality was created in 1850. The income and expenditure during the ten years ending 1902–3 averaged 5·6 lakhs. The income in 1903–4 was 6·5 lakhs, chiefly derived from octroi (3·1 lakhs), taxes on houses, lands, animals, and vehicles, and tolls (1 lakh), municipal property and fines, &c. (Rs. 79,000), and sale of water (Rs. 40,000); and the expenditure was 5·8 lakhs, including general administration (Rs. 77,000), public safety (Rs. 96,000), water-supply (Rs. 40,000), conservancy (Rs. 83,000), hospitals and dispensaries (Rs. 41,000), public works (Rs. 69,000), and education (Rs. 33,000).

The ordinary garrison consists of a company of garrison artillery and a detachment of British infantry in the Fort; a Native infantry regiment at Daryā Ganj; and a Native cavalry regiment, for which lines have recently been built in the old cantonment, beyond the Ridge. The income and expenditure of cantonment funds during the ten years ending 1902–3 averaged Rs. 12,200.

Industries.

The occupations and industries of Delhi are numerous, comprising jewellery, silversmith's work, brass and copper ware, ivory-carving, pottery, weaving, gold and silver embroidery, miniature painting, &c. For centuries the jewellery of Delhi has had a worldwide reputation, but it is doubtful whether the productions of the present day are equal to those of Mughal

times. Ivory-carving is carried on successfully by one or two families, and within recent years some very beautiful caskets and similar articles in this material have been produced. A feature of the work is the employment of geometric open-work patterns, which are carried out with a very high degree of finish. The pottery is a kind of rough porcelain and has certain artistic qualities. It is a comparatively modern art, and is in the hands of only one or two craftsmen. An important industry is gold and silver embroidery, chiefly carried on by the dealers of the Chāndni Chauk. Although the designs are now showing signs of European influence, good Oriental patterns are still obtainable, and the art is in a fairly flourishing condition. The manufacture of gold and silver wire to carry on this industry employs a large number of hands. These *kandla kashān*, or wire-drawers, pay the municipality yearly Rs. 25,000, in return for which it supervises the melting and blending of the metal in a central workshop, and thereby gives it a guarantee of purity whose value is undisputed throughout India. Modern mill and factory industries have made great progress in the city. The Delhi Cloth and General Mills in 1904 employed 624 hands, the Hanumān and Mahādeo Spinning and Weaving Mills 895, the Kishen Cotton-Spinning Mill 575, and the Jumna Cotton-Spinning Mills 388. The principal flour-mills are the Northern India Flour-Mills with 107 employés, the Ganesh Flour-Mills with 178, and John's Flour-Mill with 113. The three sugar-cane pressing factories employed 246 hands, and the three cotton-ginning factories 305. Minor industries include printing, biscuit-making, malting, and iron and brass-work. The total number of factories, mills, &c., in 1904 was 22, and the total number of employés 3,460.

Commerce.

Delhi possesses a very considerable trade, though the continuation of the North-Western Railway on the eastern bank of the river has thrown it somewhat off the modern line of traffic. It derives importance as a trade centre at present owing to the fact that grain and piece-goods are free of octroi, and it still forms the main entrepôt for commerce between Calcutta or Bombay on the one side and Rājputāna on the other. The chief imports include chemicals, cotton, silk, fibres, grain, oilseeds, *ghī*, metals, salt, horns and hides, and European piece-goods. The exports consist of the same articles in transit, together with tobacco, sugar, oil, jewellery, and gold or silver lacework. Beyond the borders of the Province, Delhi merchants correspond with those of Jīnd, Kābul, Alwar, Bīkaner, Jaipur, and the Doāb; while with all the Punjab towns they have extensive dealings. European finance is represented by the Bengal, the National, the Delhi and London, the Allahābād, and the Upper India Banks; and several cotton merchants have agents in the city. The great trade avenue of the Chāndni Chauk, already described,

is lined with the shops and warehouses of merchants, and is one of the chief sights of interest to the visitor at Delhi.

Education.

The principal educational institution was, until 1877, the Delhi College, founded in 1792, but abolished in 1877, in order to concentrate higher education in the Punjab University at Lahore. The chief school is now the municipal high school, with six branch schools; other high schools are the Anglo-Arabic, the Anglo-Sanskrit, St. Stephen's mission school, and the Shāhzāda high school, maintained chiefly for poor descendants of the Mughal imperial family. All these receive grants-in-aid. The municipal high school has been managed by the Educational department since 1904. The city also has a normal school, which trains vernacular teachers for primary schools, a municipal industrial school, the aided middle boarding-schools for girls of the Baptist Mission and the Society for the Propagation of the Gospel, and a school on the Yūnāni system of native medicine.

Delly, Mount.—A prominent headland, 855 feet in height, on the coast of the Chirakkal *tāluk* of Malabar District, Madras, situated in 12° 2′ N. and 75° 11′ E. The correct name is Mount d'Eli (the Monte d'Ely of the Portuguese), from the ancient Malabar State of Ely or Heli, belonging to the Kolattiri Rājās, one of whose seats is near the northern slopes of the hill. The headland was a well-known landmark for mariners from the earliest times, and was the first Indian land sighted by Vasco da Gama. On the top is a small mosque, which is visited on certain holy days by large numbers of Māppillas. Creeks on either side made it almost an island; and its natural strength led to the construction of a fort, which was held in turn by Portuguese, Dutch, French, and English troops. Within sight of the hill more than one naval action has been fought. The bay to the south was formerly a regular resort of the pirates who infested these shores. A project to construct a harbour here was once set on foot, but was abandoned on account of the great expense involved.

Deloli.—Petty State in MAHĪ KĀNTHA, Bombay.

Delwāra.—Chief town of an estate of the same name in the State of Udaipur, Rājputāna, situated in 24° 47′ N. and 73° 44′ E., 14 miles almost due north of Udaipur city, among the eastern ranges of the Arāvalli Hills. Population (1901), 2,411. The estate consists of 86 villages, and is held by one of the first-class nobles of Mewār, who is styled Rāj Rānā. The income is about Rs. 72,000, and a tribute of Rs. 4,900 is paid to the Darbār. The Rāj Rānā's palace is a picturesque building on a hill to the south of, and overlooking, the town, while farther to the south on a conical peak is the temple dedicated to the goddess Rāthasen or Rāshtrasena. The Rāj Rānās of Delwāra are Jhāla Rājputs of the same family as the Rāj of BARĪ

SĀDRI; they are descended from Sajja, who came with his brother Ajja from Kāthiāwār in the beginning of the sixteenth century and was killed in 1534 at the siege of Chitor.

Deo.—Village in the Aurangābād subdivision of Gayā District, Bengal, situated in 24° 39′ N. and 84° 26′ E. It is the seat of the Deo Rājās, one of the most ancient families of Bihār, who trace their descent from the Rānās of Udaipur. In the struggle between Warren Hastings and the Rājā of Benares, the Deo Rājā, although too old to take the field in person, sent his forces to the aid of the British. His successor mustered a contingent against the mutineers at Surgujā, and his grandson rendered good service in quelling the Kol insurrection. The Rājā stood boldly forward for the British during the Mutiny of 1857. The present Rājā is a minor, and his estate is under the management of the Court of Wards. At Umgā near Madanpur, the original seat of the family, is a fine stone-built temple which an inscription on a slab shows to have been built about 1439. A temple at Deo, which is similar but more ornamented in design, probably dates from the same period, though tradition ascribes to it a fabulous age.

Deobālpur.—Ancient town in the Dīpālpur *tahsīl* of Montgomery District, Punjab. *See* DĪPĀLPUR.

Deoband Tahsīl.—Southern *tahsīl* of Sahāranpur District, United Provinces, lying between 29° 34′ and 29° 53′ N. and 77° 21′ and 77° 49′ E. On the south it marches with Muzaffarnagar District, but the boundaries are artificial. The *tahsīl* comprises three *parganas*—Rāmpur, Nāgal, and Deoband—and has an area of 385 square miles, of which 320 were cultivated in 1903–4. The population rose from 205,627 in 1891 to 220,152 in 1901. The *tahsīl* contains three towns, DEOBAND (population, 20,167), the head-quarters, and RĀMPUR (7,945) being the largest; and 311 villages. In 1903–4 the demand for land revenue was Rs. 3,85,000, and for cesses Rs. 64,000. The west of the *tahsīl* is irrigated by the Eastern Jumna Canal, and the east by the Deoband branch of the Upper Ganges Canal. The latter work, opened in 1880, has been of great value. The area irrigated in 1903–4 was 112 square miles.

Deoband Town.—Head-quarters of the *tahsīl* of the same name in Sahāranpur District, United Provinces, situated in 29° 42′ N. and 77° 41′ E., on the old road from the Doāb to the Punjab, close to the main line of the Oudh and Rohilkhand Railway. Population (1901), 20,167, of whom more than half (11,825) were Musalmāns.

According to legend, the town owes its name to the presence of a sacred grove (*Devī ban*), and an annual religious assembly still takes place in a neighbouring wood, where there is a temple of Devī. Local tradition relates that the Pāndavas spent their first exile here, and the fort is said to have been one of the earliest to fall in the raid of Sālār

Masūd Ghāzī. During the Mutiny several disturbances occurred, which were repressed without much difficulty.

The town is situated 2½ miles west of the East Kālī Nadī, and the natural drainage of the country has been altered by the construction of the canals and railway. The outskirts have been fairly well drained, but the town itself presents a great problem. A scheme estimated to cost Rs. 50,000 was sanctioned in 1904, and the work is now approaching completion. The Arabic College here is one of the most important of its kind in Upper India. It was founded about 1876 as an offshoot of the Ajmer Gate College at Delhi, now defunct. Students come from Afghānistān, Bokhāra, and Samarkand in one direction, and from Madras and Bengal in the other. The teaching is entirely devoted to Eastern learning, especially Muhammadan theology, and the institution has no connexion with Government. There are also an English and an Anglo-vernacular school, and a dispensary, besides the *munsifi* and *tahsīlī* offices. The municipality was constituted in 1868. The income and expenditure from 1892 to 1901 averaged Rs. 13,000. In 1903-4 the income was Rs. 37,000, chiefly from a special grant of Rs. 20,000 and from octroi (Rs. 15,000); and the expenditure was Rs. 18,000. Deoband is a large grain-exporting centre, and in the busy season several Calcutta firms have agents here buying wheat. Refined sugar and oilseeds are also exported, and the town is noted for the manufacture of cloth and country blankets.

Deodrug Tāluk.—*Tāluk* in Raichūr District, Hyderābād State. Including *jāgīrs*, the population in 1901 was 78,280, having increased from 76,306 in 1891, and the area 531 square miles. It has one town, DEODRUG (population, 6,773), the head-quarters; and 155 villages, of which 4 are *jāgīr*. In 1905 part of the Yergara *tāluk* was added to Deodrug. The river Kistna flows on the north and west. The land revenue in 1901 amounted to 1·7 lakhs. The soils are mostly *regar* and alluvial.

Deodrug Town.—Head-quarters of the *tāluk* of the same name in Raichūr District, Hyderābād State, situated in 16° 25′ N. and 76° 56′ E., 34 miles west of Raichūr town and 4 miles south of the Kistna. Population (1901), 6,773. Deodrug contains an old fort enclosed on all sides except the west by hills, and was the stronghold of the *poligārs* of the Bedār tribe, who were so powerful that the first of the Nizāms sought their alliance. The *tahsīl* and police inspector's offices, a dispensary, one State and six local board schools are located here. To the north of the town is a hill containing talc.

Deogaon.—Southern *tahsīl* of Azamgarh District, United Provinces, comprising the *parganas* of Deogaon, Bela-Daulatābād, and Belhābāns, and lying between 25° 38′ and 25° 57′ N. and 82° 49′ and 83° 21′ E., with an area of 389 square miles. Population fell from 264,851 in 1891

to 224,827 in 1901, the rate of decrease being much above the District average, owing to the large area of rice land which suffered from drought. There are 702 villages, but no town. The demand for land revenue in 1903–4 was Rs. 3,04,000, and for cesses Rs. 49,000. The density of population, 578 persons per square mile, is the lowest in the District. The *tahsīl* consists of a series of narrow strips separated by chains of swamps which gradually change into watercourses. The Mangai, Besū, and Gāngī are the chief streams. During the rains the swamps spread over large areas in which rice is sown. Hamlets are built in those places which are least liable to inundation. The area under cultivation in 1897–8 was 182 square miles, of which 108 were irrigated. Wells supply rather more than one-third of the irrigated area, and tanks and swamps most of the remainder.

Deogarh Subdivision.—Western subdivision of the Santāl Parganas District, Bengal, lying between 24° 3′ and 24° 38′ N. and 86° 28′ and 87° 4′ E., with an area of 952 square miles. The subdivision is an undulating country of long ridges separated by intervening depressions; there are also several clusters of rocky hills covered with jungle. The population in 1901 was 297,403, compared with 284,115 in 1891, the density being 312 persons per square mile. It contains two towns, DEOGARH (population, 8,838), the head-quarters, and MADHUPUR (6,840); and 2,368 villages. Deogarh contains the celebrated temples of Baidyanāth.

Deogarh Town (1).—Head-quarters of the subdivision of the same name in the Santāl Parganas District, Bengal, situated in 24° 30′ N. and 86° 42′ E., 4 miles to the east of the chord-line of the East Indian Railway, with which it is connected by a steam tramway. Population (1901), 8,838. The principal object of interest is the group of twenty-two temples dedicated to Siva, which form a centre of pilgrimage for Hindus from all parts of India. The oldest temple is called Baidyanāth, or Baijnāth, and is said to contain one of the twelve oldest *lingams* of Siva in India. The legend of the temples is told by Sir W. W. Hunter in the *Annals of Rural Bengal*. The group of temples is surrounded by a high wall enclosing an extensive courtyard with a pavement of Chunār freestone, the offering of a rich Mirzāpur merchant, which cost a lakh. All the temples but three are dedicated to Siva in his form of Mahādeo; the remaining three are dedicated to his wife Pārvatī. The male and female temples are connected from the summits with silken ropes, 40 and 50 yards in length, from which hang gaudily-coloured cloths, wreaths, and garlands of flowers and tinsel. At the western entrance to Deogarh town is a masonry platform, about 6 feet in height and 20 feet square, supporting three huge monoliths of contorted gneiss; two are vertical, the third being laid upon the heads of the two uprights as a horizontal beam. These massive stones are 12 feet in length, quadri-

lateral in form, and each weighs upwards of 7 tons. There is a faint attempt at sculpture at each end of the vertical faces of the horizontal beam, representing either elephants' or crocodiles' heads. A few ruins, like those of ancient Buddhist *vihāras*, stand near the monolithic group. Deogarh was constituted a municipality in 1869. The income during the decade ending 1901–2 averaged Rs. 9,500, and the expenditure Rs. 8,500. In 1903–4 the income and expenditure were Rs. 11,800, the principal sources of income being a tax on persons (or property tax) and a conservancy rate.

Deogarh Town (2).—Head-quarters of the Bāmra Feudatory State, Bengal, situated in 21° 32′ N. and 84° 45′ E., 58 miles by road from Bāmra Road station on the Bengal-Nāgpur Railway. Population (1901), 5,702. The town lies in a hollow surrounded by hills, over one of which there is a picturesque waterfall. Deogarh has lately increased in population rapidly owing to the enlightened views of the chief, who has invited many educated natives to take up their residence at his head-quarters. It is well laid out, and has ornamental parks and gardens. The town is connected by telephone with Bāmra station, the total length of wire being 84 miles. It has also a printing press with Oriyā type, and a weekly paper is published, which circulates in Sambalpur and the Oriyā States. A high school affiliated to the Calcutta University, with a chemical and physical laboratory, is maintained by the State.

Deogarh Town (3).—Chief town of an estate of the same name in the State of Udaipur, Rājputāna, situated in 25° 32′ N. and 73° 55′ E., close to the Merwāra border, and about 68 miles north-by-north-east of Udaipur city. The town is walled, and contains a fine palace with a fort on each side of it. Three miles to the east, in the village of Anjna, is a monastery of the Nātha sect of devotees. The population of Deogarh in 1901 was 5,384, of whom about 68 per cent. were Hindus and 19 per cent. Jains. The estate consists of the town and 181 villages, and is held by one of the first-class nobles of Mewār, styled Rāwat, who belongs to the Chondāwat family of the Sesodia Rājputs. The income is about Rs. 1,20,000, and a tribute of Rs. 5,710 is paid to the Darbār.

Deogarh Peak.—Hill in the Koreā State, Central Provinces, situated in 23° 31′ N. and 82° 16′ E., with a height of 3,370 feet above sea-level.

Deogarh Fort (1).—Hill-fort in Aurangābād District, Hyderābād State. *See* DAULATĀBĀD.

Deogarh Fort (2).—Fort and ruins in the Lalitpur *tahsīl* of Jhānsi District, United Provinces, situated in 24° 32′ N. and 78° 15′ E., on the right bank of the Betwā. On a hill towering above the river is an extensive line of circumvallation, approached by a sloping ascent leading up to a gateway. Inside the wall at the north-east corner stands a

group of sixteen Jain temples, probably of Chandel origin. Many of them are in very fair repair, and the carving of some is particularly good. Jains occasionally still worship here. Below the fort lies the village of Deogarh and a fine temple of the later Gupta period. In the cliff under the south wall of the fort are two stairs cut in the solid rock, and some small rock carvings and a cave known as the Sidhguphā. There are several inscriptions in various parts of the ruins, ranging from 1097 to the eighteenth century. The fort was held by the Bundelās till 1811, when Colonel Baptiste took it.

(A. Cunningham, *Archaeological Survey Reports*, vol. x, p. 105.)

Deogarh Bāriya.—Petty State in Rewā Kāntha, Bombay. *See* BĀRIYA.

Deogiri.—Hill-fort in Aurangābād District, Hyderābād State. *See* DAULATĀBĀD.

Deolāli.—Cantonment in the District and *tāluka* of Nāsik, Bombay, situated in 19° 54′ N. and 73° 50′ E. Population (1901), 2,894, including 1,827 in the cantonment. Among the inhabitants are several families of *deshmukhs* who in former times, as headmen in their villages, had great influence over the Marāthās of the District. The village is about 4 miles south-east of Nāsik town, on the Great Indian Peninsula Railway. During the dry months it is the gathering-place of numerous grain brokers from Bombay. The cantonment is situated about 3½ miles to the south-west. The income and expenditure of the cantonment fund in 1903–4 were respectively Rs. 14,950 and Rs. 11,060. The camp affords accommodation for 5,000 men, and is in continuous occupation during the trooping season, as nearly all drafts are halted here, after disembarkation at Bombay, before proceeding farther up-country, as well as drafts on their way to England[1]. The situation is healthy, the water good, and the views of the distant ranges of hills remarkably fine.

Deolī.—Town in the District and *tahsīl* of Wardha, Central Provinces, situated in 20° 39′ N. and 78° 29′ E., 11 miles from Wardhā town and 5 miles from Degaon station. Population (1901), 5,008. Deolī was created a municipality in 1867. The municipal receipts during the decade ending 1901 averaged Rs. 4,200. In 1903–4 the receipts were Rs. 6,000, derived chiefly from fees on the registration of cattle. Deolī was formerly an important cotton mart, but has been supplanted by stations on the railway, and the population is now less than in 1872. It contains a hand cotton-weaving industry, which is not prosperous, and a large weekly cattle market is held here. The town has a vernacular middle school and a dispensary.

Deoli.—Cantonment in Ajmer-Merwāra, Rājputāna, situated in 25° 45′ N. and 75° 22′ E., 1,122 feet above sea-level. Population

[1] The importance of Deolāli as a trooping camp has recently (1907) been reduced.

(1901), 5,803, including the Agency Bazar. Deoli lies on an open plain, 57 miles south-east of Nasīrābād. The station was laid out by Major Thom, commanding the late Kotah Contingent. Lines exist for a regiment of Native infantry and a squadron of Native cavalry. The station is garrisoned by the 42nd Deoli Regiment, which up to 1903 was known as the Deoli Irregular Force. Deoli is situated on the triple boundary of Ajmer, Jaipur, and Mewār, and is the headquarters of the Haraoti and Tonk Political Agency.

Deolia (or Deogarh).—The old capital of the State of Partābgarh, Rājputāna, situated in 24° 2′ N. and 74° 40′ E., about 7½ miles due west of Partābgarh town. Population (1901), 1,345. The town was built about 1561 by Bīka, the founder of the State, and is said to take its name from a female Bhīl chieftain, Devī or Deū Mīnī, who lived in the vicinity, and whom Bīka defeated. Deolia stands on a steep hill, 1,809 feet above sea-level, detached from the edge of the plateau, and its natural strength commands the country on every side. In old days it was a fortified town, but the walls have all crumbled away and only a gateway remains. The old palace, which was built by Mahārāwat Hari Singh about 1648 and was much damaged by heavy rains in 1875, has been to some extent repaired and the present chief spends part of his time here. Among the tanks the largest is the Tejā, named after Tej Singh, who ruled in 1579; and adjoining it is an old bath now in ruins, said to have been built by Mahābat Khān, Jahāngīr's greatest general. In the town are several Hindu and two Jain temples, a branch post office, a small vernacular school (daily average attendance 14 in 1904), and a dispensary.

Deoprayāg.—Village in Tehrī State, United Provinces. *See* DEVAPRAYĀG.

Deorha.—Capital of Jubbal State, Punjab, and residence of the Rānā, situated in 31° 7′ N. and 77° 44′ E., on a tributary of the river Pābar, in a deep valley, terraced for the careful cultivation of rice and other crops. Population (1901), 250. The Rānā's residence is built in partially Chinese style, the lower portion consisting of masonry, while the upper half is ringed round with wooden galleries capped by overhanging eaves. It is remarkable for the enormous masses of *deodār* timber used in its construction. Elevation above sea-level, 6,550 feet.

Deorī.—Town in the Rehlī *tahsīl* of Saugor District, Central Provinces, situated in 23° 23′ N. and 79° 2′ E., on the Sukchain river, 40 miles from Saugor town. Population (1901), 4,980. Deorī contains an old fort. It was created a municipality in 1867. The municipal receipts during the decade ending 1901 averaged Rs. 4,200; and in 1903–4 they amounted to Rs. 4,300, the chief source being a house tax. When the produce of Saugor District was taken by road to Karelī station, Deorī was a commercial town of some importance, but this is

no longer the case. It contains a vernacular middle school, a girls' school, and a dispensary.

Deoriā Subdivision.—Subdivision of Gorakhpur District, United Provinces, comprising the DEORIĀ and HĀTĀ *tahsīls*.

Deoriā Tahsīl.—South-eastern *tahsīl* of Gorakhpur District, United Provinces, conterminous with the *pargana* of Salempur or Salempur-Majhaulī, lying between 26° 5′ and 26° 34′ N. and 83° 37′ and 84° 11′ E., with an area of 583 square miles. Population fell from 517,793 in 1891 to 493,822 in 1901, the rate of decrease being the highest in the District. There are 1,287 villages and six towns—BARHAJ (population, 10,054), GAURĀ (7,965), LĀR (7,305), SALEMPUR-MAJHAULĪ (6,051), PAINĀ (5,029), and Deoriā or Bharaulī (2,151), the *tahsīl* head-quarters. The demand for land revenue in 1903-4 was Rs. 4,48,000, and for cesses Rs. 72,000. The density of population, 847 persons per square mile, is the highest in the District, and the *tahsīl* is the most fertile and best cultivated. It is bounded on the south by the Rāptī and Gogra, and the Little Gandak crosses the centre. The area under cultivation in 1903-4 was 456 square miles, of which 243 were irrigated. Tanks, swamps, and small streams supply only about one-sixth of the irrigated area, and wells the remainder, being a more important source in this *tahsīl* than in any other of Gorakhpur.

Dera Ghāzi Khān District.—District in the Multān Division of the Punjab, lying between 28° 25′ and 31° 20′ N. and 69° 19′ and 70° 54′ E., with an area of 5,306 square miles. It is the only District of the Punjab lying entirely west of the Indus, which separates it on the east and south-east from the Districts of Miānwāli and Muzaffargarh and from Bahāwalpur State. On the south it adjoins the Sukkur District of Sind; on the west Baluchistān; and on the north the District of Dera Ismail Khān in the North-West Frontier Province.

Physical aspects.

Its conformation is largely due to the action of the torrents which drain the Sulaimān mountains. In the north the mountains rise into peaks 10,000 feet high, while two smaller chains run parallel with the main range, between it and the plain; the two merge into one and disappear in the north of the Dera Ghāzi Khān *tahsīl*. The main chain gradually diminishes southward, until in the Māri mountain it spreads out into a large and fairly level plateau. A large number of torrents drain these hills, which, excepting the Vihowa, Sangarh, and Kahā, flow only when fed by the monsoon rains. Then they come down heavily laden with silt, which is deposited yearly over the space between the base of the hills and the Indus, and has formed the tract of loamy soil, called the Pachhād, sloping gently from the hills towards the river, and watered by the torrents which are dammed up at various points along their

courses. The Pachhād touches the Indus at the north and the south of the District; between these two points, however, a tract called the Sind intervenes, consisting of low-lying land thrown up by the Indus, irrigated by inundation canals, and constantly liable to be swept by floods.

The greater part of the District lies on the alluvium; but its western boundary runs for some distance along the edge of the Siwālik beds of the Sulaimān range, and, turning westwards near Harrand, includes a considerable area of Tertiary rocks. These consist of sandstones and shales of eocene age, with subordinate bands of Nummulitic limestone, overlain by miocene sandstones and clays of the Nāri and lower Manchhar or Siwālik series; they pass up into sandstones, clays, and conglomerates belonging to the Upper Siwālik group of pliocene age. West-south-west of Dera Ghāzi Khān town a small outlying ridge of upper Siwālik beds rises out of the alluvium south of Sakhi Sarwar. Cretaceous rocks are found in the Sulaimān range to the west of the District[1].

Near the Indus the flora is mainly that of the south-west Punjab; but towards the hills the West Asian element predominates, many species of Baluchistān and south-eastern Afghānistān being represented. Native trees are few, but the *tāli* (*Dalbergia Sissoo*) and the Mesopotamian poplar (*Populus euphratica*) are common by the Indus. The date-palm is extensively cultivated near that river.

Tigers have been extinct for nearly thirty years, and leopards are found only in the hills, where small black bears and hyenas are also met with. In the plains wolves are numerous, while wild hog and hog deer are common in the dense river jungles.

The climate is exceedingly dry and not unhealthy, except where the land is waterlogged. The cold season is very short, comprising only December and January. In the hot months a burning blast known as the *loh* blows over the Pachhād, and has often proved fatal to life. In the hill tract the climate is mild and pleasant in the summer months, and the wind blows continually. The misty clouds which envelop the Himālayas in the monsoon are seldom seen, and the rain generally takes the shape of an afternoon shower, after which the air resumes its normal dry condition. The health of the people has suffered from the rise of water-level in the soil, due to the near approach of the Indus; and fevers, pneumonia, and kindred diseases are on the increase.

About 12 inches of rain fall annually at the hill station of Fort Munro, and as much as 19 inches has been recorded there in a summer. In the plains the fall is very scanty, varying from 6 inches at Taunsa to 4 at Rājanpur. The maximum recorded in the plains of late years was 20 inches at Taunsa in 1892-3, and the minimum

[1] Blanford, 'Geological Notes on the Hills between Quetta and Dera Ghāzi Khān,' *Memoirs, Geological Survey of India*, vol. xx, pt. ii.

0·1 inch at the same place in 1891–2. The country bordering on the Indus is always liable to floods. Great floods occurred in 1812, 1833, and 1841. In 1856 the cantonment and civil station of DERA GHĀZI KHĀN were washed away, and great damage was done in 1878 and 1882. The river Indus had been steadily though gradually shifting its course westwards for a long time past; but no action was taken till it came dangerously close to the town of Dera Ghāzi Khān in 1889, when it was decided to construct a stone embankment, which has been effective.

History.

That the tract between the Sulaimān mountains and the Indus was at an early period the seat of a Hindu population appears certain, but the local traditions are vague and inconsistent. Harrand, Māri, and Asni are said to have been the only towns, the rest being a barren wilderness. Popular etymology connects Harrand with Harnākus, the *daitya* who was devoured by the lion incarnation of Vishnu; it also derives Asni from *āsan*, the place or seat of Rājā Rasālū, the mythical king of the Punjab, and declares Māri to be the *māri* or abode of Kokkilān, his faithless queen. Kot Khemāli in the south of the Rājanpur *tahsīl* is assigned to Khewa, a Rājā whose contemporary Sewa founded Sili.

With the rest of Sind, the District fell in the year A.D. 712 before the young Arab conqueror Muhammad bin Kāsim, the first Muhammadan invader of India, and throughout the period of Muhammadan supremacy it continued to rank as an outlying apanage of the Multān province. In 1445 that province became independent under the Langāh family; and about the year 1450 the Nāhars, a branch of the Lodī family connected with the dynasty which then sat upon the throne of Delhi, succeeded in establishing an independent government at Kīn and Sītpur. The Nāhar dynasty soon extended their dominions for a considerable distance through the Derājāt; but as time went on, their power was circumscribed by the encroachments of Baloch mountaineers upon the western frontier. Malik Sohrāb Baloch, the first of these invaders, received a fief from the Langāh rulers, and was followed by the Mirāni chieftain Hāji Khān, whose son, Ghāzi Khān, gave his name to the town which he founded before the end of the fifteenth century. Eighteen princes of the same family held successively the lower Derājāt, and bore alternately the names of their ancestors, Hāji and Ghāzi Khān. The Mirānis and Nāhars soon came into conflict, and the latter were confined to the southern part of the District, the northern border of the Rājanpur *tahsīl* being approximately the dividing line between the two powers.

Under the house of Akbar, the dynasty of Ghāzi Khān made a nominal submission to the Mughal empire; but though they paid a quit-rent, and accepted their lands in *jāgīr*, their practical independence remained undisturbed. In 1700, towards the close of Aurang-

zeb's reign, one of the Ghāzi Khāns rebelled, and was defeated by the governor of Multān. About this time the Kalhora family rose into prominence in Sind, and soon came into contact with the Mirānis, and so far prevailed that when Nādir Shāh's invasion was followed in 1739 by the cession to him of all the country west of the Indus, he recognized as his governor in Dera Ghāzi Khān not the Mirāni chief but his Gūjar Wazīr, in subordination to Nūr Muhammad Kalhora. The last Ghāzi Khān who exercised actual authority at Dera Ghāzi Khān died in 1758. The Nāhars had already lost Kīn to the Balochs, and were expelled about this time from Sītpur by Makhdūm Shaikh Rājan, from whom the town of Rājanpur takes its name.

A series of Afghān rulers succeeded under the Durrāni monarchs, but this period was much disturbed by internecine warfare among the Baloch clans. Before long, all semblance of order disappeared, and a reign of anarchy set in. Canals fell into disrepair, cultivation declined, the steady and industrious among the peasantry emigrated to more prosperous tracts, and the whole District sank into a condition more wretched and desolate than that which had prevailed up to the accession of Ghāzi Khān, three centuries before. Meanwhile the Sikh power had been rising in the Punjab proper. In 1819 Ranjīt Singh extended his conquests in this direction beyond the Indus, and annexed the southern portion of the present District. Sādik Muhammad Khān, Nawāb of Bahāwalpur, received the newly acquired territory as a fief, on payment of an annual tribute to Lahore. In 1827 the Nawāb overran the northern portion, all of which passed under the suzerainty of the Sikhs. Three years later, however, he was compelled to give up his charge in favour of General Ventura. In 1832 the famous Sāwan Mal of Multān took over the District in farm; and his son Mūlrāj continued in possession until, at the close of the second Sikh War, Dera Ghāzi Khān passed into the hands of the British. Since that period, an active and vigilant administration has preserved the District from any more serious incident than the occasional occurrence of a frontier raid. The wild hill tribes have been brought into submission, while the restoration of the canals has once more made tillage profitable, and largely increased the number of inhabitants. The Mutiny of 1857 found Dera Ghāzi Khān so peacefully disposed that the protection of the frontier and the civil station could be safely entrusted to a home levy of 600 men, while the greater part of the regular troops were withdrawn for service in the field elsewhere.

Population.

The population of the District at the last three enumerations was: (1881) 385,470, (1891) 427,758, and (1901) 471,140, dwelling in 5 towns and 713 villages. It has increased by 10·1 per cent. during the last decade, the increase being greatest in the Jāmpur *tahsīl* and least in Rājanpur. The Dis-

trict is divided into four *tahsīls*, DERA GHĀZI KHĀN, SANGARH, RĀJANPUR, and JĀMPUR, the head-quarters of each being at the place from which it is named, except in the case of Sangarh, the head-quarters of which are at Taunsa. The towns are the municipalities of DERA GHĀZI KHĀN, the administrative head-quarters of the District, JĀMPUR, RĀJANPUR, DĀJAL, and MITHANKOT.

The following table shows the chief statistics of population in 1901:—

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Dera Ghāzi Khan	1,460	1	215	193,744	132.7	+ 9.4	8,328
Sangarh . .	1,041	...	170	86,482	83.1	+ 12.5	3,189
Rājanpur . .	2,018	2	179	93,676	46.4	+ 3.8	3,145
Jāmpur . .	895	2	149	97,247	108.7	+ 16.3	2,945
District total	5,306	5	713	471,149	88.8	+ 10.1	17,607

NOTE.—The figures for the areas of *tahsīls* are taken from revenue returns. The total District area is that given in the *Census Report*.

Muhammadans number 412,012, or over 87 per cent. of the total, and the shrine of the saint Sakhi Sarwar is famous all over the Punjab. There are 57,815 Hindus and 1,027 Sikhs. The density of the population, 89 persons per square mile, is one of the lowest in the Province. The languages spoken are chiefly Baluchī and Western Punjābi.

Ethnographically the District belongs to Baluchistān, and Baloch agriculturists number 168,000, or 36 per cent. of the total. Jats (119,000) form 25 per cent. After them come the Rājputs (15,000) and Pathāns (13,000). Saiyids, the Muhammadan priestly class, number 7,000. The Aroras, numbering 43,000, are the only important commercial and money-lending class, the Khattrīs and Khojas returning only 3,000 each. Of the artisan classes, the Mochīs (shoemakers and leather-workers, 7,000), Tarkhāns (carpenters, 4,000), and Julāhās (weavers, 3,000) are the most important; and of the menial classes, the sweepers, mostly known as Kutānas (11,000) and Māchhis (fishermen, bakers, and water-carriers, 11,000). The Mallāhs (boatmen) number 2,000. Other castes worth mention are the Ods (3,000), a wandering tribe of field-labourers; the Bahnas (2,000), a caste chiefly employed in domestic service and almost entirely confined to this District; and the Kehals (600), a vagrant fishing tribe. About 49 per cent. of the population are supported by agriculture.

The Medical Mission at Dera Ghāzi Khān town, connected with the Church Missionary Society, was founded in 1879. The new

Mission Hospital, completed in 1895, treats 10,000 patients annually, exclusive of those treated in the Zanāna Hospital. The mission has also a hospital at Fort Munro, which is removed for six months of the year to Sakhi Sarwar. The District contained 81 native Christians in 1901.

Agriculture.

The soil of the Pachhād consists of a rich loam formed of the detritus of the hills, while that of the Sind is an alluvial clay. Owing to the scanty rainfall, agriculture depends entirely on the facilities for irrigation, and there is practically no unirrigated cultivation. For the most part the Sind is protected by wells or canals; the Pachhād is chiefly dependent on the summer rainfall in the hills, which is brought down by the torrents and distributed over the fields by means of embankments. The rain that falls in the plains has little effect on the summer harvest; the cold-season rains are, on the other hand, beneficial to all crops and necessary for some.

The District is held chiefly on the *bhaiyāchārā* and *pattīdāri* tenures; *zamīndāri* lands, however, cover about 740 square miles, and lands leased from Government about 40 square miles.

The following table gives the main agricultural statistics for 1903-4, areas being in square miles:—

Tahsil.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Dera Ghāzi Khān	1,457	409	279	521
Sangarh	1,065	310	47	48
Rājanpur	2,019	236	117	1,344
Jāmpur	895	279	104	423
Total	5,436*	1,234	547	2,336

* The figures, which do not agree with the area as shown at pp. 248 and 252, are taken from later returns.

Wheat is the chief crop of the spring harvest, covering 271 square miles in 1903-4; gram and barley covered only 25 and 10 square miles respectively. Poppy and tobacco are important spring crops, covering 534 and 2,065 acres. The great and spiked millets are the principal autumn staples, covering 239 and 132 square miles. Other autumn crops are rice (68 square miles), pulses (55), cotton (57), and indigo (14).

The cultivated area varies enormously from year to year, according to the rainfall in the hills and the rise of the Indus. The tendency is, however, to increase; with improved working of the canals there is every prospect of considerable extension, as more than three-eighths of the District consists of cultivable land not cultivated. Nothing has been done to improve the quality of the crops grown. Loans

for the construction of wells, embankments, &c., are occasionally taken, but are not very popular, only about Rs. 5,000 having been advanced during the five years ending 1903-4.

A well-known strain of cattle is bred at Dājal, in the Jāmpur *tahsīl*, and in the Mazāri country, south of Rājanpur, which closely resembles the breed of Bhāgnāri in Baluchistān. The Baloch mares of the District are celebrated for strength and endurance. The breed of donkeys is also fine. The Army Remount department maintains 13 horse and 12 donkey stallions, and the District board 9 pony stallions. An annual horse fair is held at Dera Ghāzi Khān. Large numbers of camels are bred in the District, which, like those of Baluchistān, can traverse hilly ground where the plains animals would be useless. Sheep and goats are very numerous; the fat-tailed breed of sheep deserves special notice, and often fetches high prices.

Practically the whole cultivation is irrigated from one source or another. Of the total area cultivated in 1903-4, 547 square miles, or 44 per cent., were classed as irrigated. Of this area, 72 square miles were irrigated from wells, 269 from wells and canals, 150 from canals, and 46 from ponds and channels. In addition, 216 square miles, or nearly 18 per cent. of the cultivated area, are subject to inundation from the Indus, or fertilized by dams holding up the water of the mountain torrents. On an average only about 40 per cent. of the cultivated area is wholly dependent on the rainfall, but this cultivation is precarious in the extreme. Canal-irrigation is from the INDUS INUNDATION CANALS, a system of fourteen canals with a total length of 741 miles. As these flow only while the Indus is high, or for an average of about 150 days in the year, canal-irrigation is largely supplemented by wells, which are the only source of supply for a good deal of cultivation on the skirt of the Pachhād. The District contains 10,029 masonry wells, all worked by cattle with Persian wheels, besides 3,082 unbricked wells, lever wells, and water-lifts. Water-lifts are, like wells, worked by Persian wheels to raise water from ponds and channels. Irrigation from the waters of the Kahā torrent is perennial. Elsewhere hill-torrent irrigation is dependent on the monsoon rains, and is effected by diverting the water on to the fields by a system of embankments and channels. Nearly all the cultivated area of the Pachhād is irrigated by this means.

The District contains 28 square miles of 'unclassed' forest under the Deputy-Conservator of the Multān Forest division, and 542 of 'unclassed' forest under the Deputy-Commissioner. The forests are chiefly grazing-grounds subject to inundation, with a scattered growth of poplar (*Populus euphratica*), tamarisk, *jāl* (*Salvadora oleoides*), and *jand* scrub. The date-palm abounds, especially in the Dera Ghāzi Khān *tahsīl*. The revenue in 1903-4 from tracts under the Forest

department was only Rs. 260, and from those under the Deputy-Commissioner Rs. 29,000.

The Sulaimān Hills contain seams of coal which are not of sufficient thickness to repay working. Alum and saltpetre used to be manufactured, but the industry has now died out. Fuller's earth is found and lime is burnt to some extent, limestone boulders abounding in the torrent beds. Impure carbonate of soda is made from the ashes of the *Salsola Griffithsii*.

Woollen fabrics are woven in the border hills; and blankets, carpets, saddle-bags, and other articles of wool are made in the plains. Silk is woven at Dera Ghāzi Khān town, which has also a flourishing manufacture of ivory bangles. A good deal of cotton cloth is produced, and the lacquered woodwork of JĀMPUR has some reputation. The only factory in the District, a combined cotton-ginning and cornmill, which in 1904 employed 49 hands, is situated at Dera Ghāzi Khān town.

Trade and communications.

Wheat, millets, indigo, opium, cotton, hides, and mustard seed are sent down the Indus to Karāchi, and also to Multān, while wheat and gram are imported from higher up the Indus. Other imports are salt, pulses, sugar, leather, iron, and piece-goods, chiefly from Multān. Dera Ghāzi Khān town and Mithankot are the chief trade centres.

The District possesses no railways, and communication between Dera Ghāzi Khān town and the rail-head at Ghāzi Ghāt on the east bank of the Indus is effected in the summer by means of a steam ferry, replaced by a bridge of boats in the cold season. The river is crossed by thirty-three ferries in all. A great deal of trade with Sind is carried by the Indus. The District contains 29 miles of metalled and 660 miles of unmetalled roads. Of the metalled roads, 23 miles are Imperial, and the rest under the Provincial Public Works department. Of the unmetalled roads, 147 miles are Imperial, 303 Provincial, and 210 District. The only metalled road of importance is that to Sakhi Sarwar, and for the most part the roads are unfit for wheeled traffic. No less than ninety-two passes lead from the District through the Sulaimān Hills. Of these the most important are the Sangarh, Khair, Kahā, Chāchar, and Siri.

Famine.

Owing to the impossibility of cultivation except where there is irrigation, the District has never suffered seriously from famine. The area of crops matured in the famine year 1899-1900 amounted to 77 per cent. of the normal.

Administration.

The District is divided into the four *tahsīls* of DERA GHĀZI KHAN, RĀJANPUR, JĀMPUR, and SANGARH, each under a *tahsīldār* and a *naib-tahsīldār*, and is in charge of a Deputy-Commissioner, aided by four Assistant or Extra-Assistant Commissioners, of whom one is in charge of the Rājanpur subdivision and one

of the District treasury. Dera Ghāzi Khān town is the head-quarters of an Executive Engineer of the Canal department.

The Deputy-Commissioner as District Magistrate is responsible for criminal work, and has powers under the Frontier Crimes Regulation. Civil judicial work is under a District Judge. Both officers are supervised by the Divisional Judge of the Multān Civil Division, who is also Sessions Judge. There are two Munsifs, one at head-quarters and the other at Fāzilpur during the winter and at Rājanpur during the summer. The predominant form of crime is cattle-theft, and murders due to tribal enmity and quarrels about women are frequent.

From 1819, when Ranjīt Singh seized the Derajāt, until 1830, Dera Ghāzi Khān was farmed to the Nawāb of Bahāwalpur for a sum of 5 lakhs. Dīwān Sāwan Mal ruled from 1832 to 1844, and the District prospered. The land revenue was taken in kind, and was generally a quarter of the gross produce. On annexation in 1849, General van Cortlandt, the Deputy-Commissioner, made a summary settlement, based on the full share of produce taken by the Sikhs, commuted into cash. A fall in prices followed, and the settlement soon broke down. Two other summary settlements were found necessary before the assessment reached a reasonably low pitch. The regular settlement was made between 1869 and 1874. The fixed assessment system was to be applied, and a demand of $4\frac{1}{4}$ lakhs was sanctioned. In the revised settlement of 1893–7 fluctuating assessments were introduced in the more uncertain tracts, and a demand of nearly 5 lakhs was imposed. The rates ranged from R. 0–2–4 to Rs. 1–9–5 on 'wet' land, and from 4 pies to R. 0–5–7 on 'dry' land. In 1903–4 the land revenue and cesses amounted to 6·4 lakhs. The average size of a proprietary holding is 5·7 acres.

The collections of land revenue alone and of total revenue are shown below, in thousands of rupees:—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	3,70	3,78	4,44	4,70
Total revenue . .	4,94	5,23	7,50	7,86

The District contains five municipalities: DERA GHĀZI KHĀN, JĀMPUR, RĀJANPUR, DĀJAL, and MITHANKOT. Outside these, local affairs are managed by the District board. Its income, derived mainly from a local rate, was Rs. 59,700 in 1903–4. The expenditure was Rs. 66,300, education being the largest item.

The regular police force consists of 550 of all ranks, including 89 municipal police. The Superintendent is usually assisted by 4 inspectors. The village watchmen number 381. There are 18

police stations and one outpost. The District jail at head-quarters has accommodation for 384 prisoners.

The District stands fifteenth among the twenty-eight Districts of the Province in respect of the literacy of its population. In 1901 the proportion of literate persons was 3·7 per cent. (6·7 males and 0·2 females). The number of pupils under instruction was 1,895 in 1880–1, 4,991 in 1890–1, 6,071 in 1900–1, and 7,303 in 1903–4. In the last year there were 5 secondary and 66 primary (public) schools, and 20 advanced and 162 elementary (private) schools, with 194 girls in the public and 744 in the private schools. The principal school is the high school at Dera Ghāzi Khān town. The expenditure on education in 1903–4 was Rs. 34,000, of which Rs. 2,200 came from Government, Rs. 9,000 from fees, Rs. 7,000 from municipal funds, and Rs. 14,000 from District funds.

Besides the civil hospital at Dera Ghāzi Khān town, the District possessed seven outlying dispensaries in 1904. At these institutions 107,885 out-patients and 2,030 in-patients were treated, and 5,401 operations were performed. The expenditure was Rs. 19,000, Local funds contributing Rs. 10,000 and municipal funds Rs. 6,000.

The number of successful vaccinations in 1903–4 was 12,369, representing 26·3 per 1,000 of the population. Vaccination is compulsory in Dera Ghāzi Khān town.

[A. H. Diack, *District Gazetteer* (1896–7); *Settlement Report* (1898); and *Customary Law of the Dera Ghāzi Khān District* (1898).]

Dera Ghāzi Khān Tahsīl.—*Tahsīl* of Dera Ghāzi Khān District, Punjab, lying between 29° 34′ and 30° 31′ N. and 70° 10′ and 70° 54′ E., with an area of 1,457 square miles. It is bounded on the east by the Indus and on the west by independent territory. The tract near the base of the Sulaimān Hills on the west is irrigated by hill torrents. The eastern portion is watered by inundation canals, river floods, and wells. The *tahsīl* contains the peaks of Ekbhai and Fort Munro, which are respectively 7,462 and 6,300 feet above sea-level. The population in 1901 was 193,744, compared with 177,062 in 1891. DERA GHĀZI KHĀN TOWN (population, 23,731) is the *tahsīl* head-quarters. There are also 215 villages. The shrine of SAKHI SARWAR is a place of great religious importance, and ROJHAN is the capital of the Mazāri Balochs. The hill station of FORT MUNRO lies in this *tahsīl*. The land revenue and cesses in 1903–4 amounted to 2·8 lakhs.

Dera Ghāzi Khān Town.—Head-quarters of the District and *tahsīl* of Dera Ghāzi Khān, Punjab, situated in 30° 3′ N. and 70° 47′ E., on the right bank of the Indus. Population (1901), 23,731, of whom 13,295 were Muhammadans and 9,988 Hindus. The town takes its name from the Mirāni chief Ghāzi Khān, by whom it was founded at the end of the fifteenth century, and has from its foundation continued

to be the seat of local administration. The Kastūri canal skirts its eastern border, fringed with thickly-planted gardens of mango-trees; while *ghāts* line the banks, thronged in summer by numerous bathers. A mile to the west lies the civil station, and the cantonment adjoins the houses of the District officials. The original station stood to the east of the town, but disappeared during the flood of 1857. The courthouse occupies the reputed site of Ghāzi Khān's garden; while the *tahsīl* and police offices replace an ancient fort, levelled at the time of British annexation. A handsome bazar has several good shops, built on a uniform plan. Many large and striking mosques adorn the town, the chief being those of Ghāzi Khān, Abdul Jawār, and Chūta Khān. The Sikhs converted three of them into temples of their own faith during their period of supremacy. The Indus divides the town from the North-Western Railway, which has a station at Ghāzi Ghāt. The great trade route from Bannu and Dera Ismail Khān to Jacobābād runs through the town, but the road is not metalled. Some silk is woven in the town, which has a flourishing manufacture of ivory bangles and a less important one of brass vessels. The town has a considerable export of grain, cotton, and indigo. It possesses a cotton-ginning factory in which also rice is husked, wheat ground, and oil pressed; the number of employés in 1904 was 49.

The town and cantonment have always been at the mercy of the Indus. In 1856 both were completely washed away. In 1878 the new cantonment was flooded and practically destroyed. A stone embankment was constructed in 1889–91, but in August, 1895, the river attacked its northern end. This point was immediately strengthened and made into a groyne, which has withstood the attacks made by the river. The works have since been further strengthened; and in 1896 more stone-heads were constructed one furlong apart in continuation of the old stone embankment and above the groyne, but they were completely washed away when the river attacked them the following year. In 1901 three hurdle dikes were constructed three-quarters of a mile apart along the west bank, two of which (the upper ones) were carried away the same year owing to an untimely flood which occurred before they were quite complete; the third dike is still standing, with a small breach in the middle of its length. Though the two upper dikes were destroyed, yet they did their work admirably in silting up the main channel and reclaiming several square miles of land; at the third or lowest dike there has been an accumulation of silt some 12 to 15 feet deep. The system of irrigation dams has also been useful in silting up shallow portions of the river and thus reclaiming a vast amount of land. All danger has been averted for the present; but the subsoil is so waterlogged that it is unhealthy in the extreme, and the station may yet have to be abandoned.

The municipality was created in 1867. The income and expenditure during the ten years ending 1902-3 averaged Rs. 96,800. In 1903-4 the income and expenditure were Rs. 79,500 and Rs. 82,500 respectively. The chief sources of income were octroi (Rs. 48,700) and house and land tax (Rs. 11,600); while the main items of outlay were conservancy (Rs. 8,500), education (Rs. 13,000), medical (Rs. 5,400), public safety (Rs. 6,900), and administration (Rs. 5,800). The chief educational institution is the Anglo-vernacular high school, supported by the District board, with 700 pupils. The town also has a civil hospital. The garrison in the cantonment consisted, until 1905, of one Native infantry regiment and a detachment of Native cavalry; but the regular troops have been withdrawn, and the garrison is now composed only of the Baloch levy. The income of cantonment funds during the ten years ending 1902-3 averaged Rs. 1,500, and the expenditure Rs. 1,300.

Dera Gopipur.—*Tahsīl* of Kāngra District, Punjab, lying between 31° 40′ and 32° 13′ N. and 75° 55′ and 76° 32′ E., with an area of 515 square miles. It extends from the high ridge on the north-east, which separates it from the Kāngra *tahsīl*, across the valley of the Beās to the Jaswān range on the south-west, which separates it from Hoshiārpur. The rich plain which lies between the Gaj and the Beās is irrigated by cuts from the Gaj and the Buner. The population in 1901 was 125,536, compared with 125,512 in 1891. It contains 145 villages, including Dera Gopipur, the head-quarters, HARĪPUR, and JAWĀLA MUKHI. The land revenue and cesses amounted in 1903-4 to 2 lakhs.

Dera Ismail Khān District.—Southernmost District of the North-West Frontier Province, lying between 31° 15′ and 32° 32′ N. and 70° 5′ and 71° 22′ E., with an area of 3,780 square miles. The District forms an irregular cone, pointing south, its base or north being formed by the crest of the Bhittanni and Marwat ranges, its eastern border by the river Indus, and its western by the Shirāni and Sulaimān Hills. Its southern extremity is barely 20 miles in breadth, and adjoins the District of Dera Ghāzi Khān in the Punjab. The Khisor range, also called the Ratta Koh (or 'red mountain'), penetrates its north-eastern corner for some miles, intervening between the Indus and the eastern end of the Bhittanni hills, which here turn to the north-east and run parallel to it. The rest of the District is divided between the *kachi* or Indus riverain and the *dāman*, a great plain stretching between it and the hills. The *dāman*, or 'skirt of the hills,' is a term applicable in its strict sense only to the tract inhabited by Pathān tribes stretching immediately beneath the hills, while the rest of the plain up to the *kachi*, which is inhabited by Jats, is the *makkalwad*; but the latter

Physical aspects.

term is now disused, and the whole area from the hills to the *kachi* is called the *dāman*. It is a level plain without trees and grass, and except where cultivated is unbroken save by a few scattered bushes. In places even these do not grow, the soil being a firm, hard clay into which water does not sink readily, though after continuous rain it is turned into a soft, tenacious mud, and the country becomes impassable. Such soil is locally called *pat*. The *dāman* is intersected by numerous torrents, which flow from the eastern slopes of the Sulaimān range and form deep fissures in its level expanse. For the greater part of the year these torrents are almost dry, carrying but slight streams of clear water which disappear long before they reach the Indus, but after rain they become roaring torrents bringing down water discoloured by heavy silt. But for these streams the *dāman* would be a desert, but by arresting their flow and spreading them over the barren levels, the cultivators transform the whole face of the country; and the richly cultivated fields, with their embankments planted with tamarisk trees lying against the background of blue hills, give the tract in places quite a picturesque look. The *kachi* or Indus riverain is a narrow strip of alluvial land beneath the old bank of the Indus, partly overgrown with tamarisk and poplar jungle and tall *Saccharum* grass.

[1] The District has only been visited occasionally by geologists. The greater portion of its surface is occupied by the recent and post-Tertiary gravels and alluvium belonging to the Indus drainage area. On its western boundary in the Shirāni and Sulaimān Hills, the main formation runs north and south in one great anticlinal arch or fold with minor secondary folding eastwards near the plains. The lowest formation seen along the main axis of the range is probably of Jurassic age, and is a thick, massive limestone. Above it come the so-called Belemnite shales of neocomian (?) age. Above these lie immense thicknesses of eocene Nummulitic limestone, sandstone, and shales, the whole having a resemblance to the Baluchistān and Sind rocks rather than to those of the country farther north. Over these are the Siwālik sandstones, shales, and conglomerates of younger Tertiary age, dipping regularly under the recent deposits of the Indus valley. On the northern borders of the District the strike bends sharply round to the south-east and east-north-east, following the curve of the Bhittanni, Marwat, and Khisor ranges. Here, besides Siwālik conglomerate and sandstone, the Marwat and Khisor ranges show the lower Permo-carboniferous boulder-bed of glacial origin, containing boulders of igneous rock derived by ice transport from the Mallāni

[1] C. L. Griesbach, 'Geology of the Takht-i-Sulaiman Range,' *Records, Geological Survey of India*, vol. xvii, part iv; and T. D. La Touche, 'Geology of the Sherani Hills,' *Records, Geological Survey of India*, vol. xxvi, part iii; A. B. Wynne, 'Trans-Indus Salt Range,' *Memoirs, Geological Survey of India*, vol. xvii, part iii.

series of Rājputāna. Above the boulder-bed come 500 feet of upper Permian, grey magnesian, and white limestone, with some sandstone and earthy beds containing Productus limestone fossils like those to the east of the Indus; also thin-bedded ceratite limestone of the Trias, and above that 1,500 feet of Jurassic sandstones and limestones, passing into Cretaceous at the top of the Sheikh Budīn hill in the Marwat range. A thin band of Nummulitic limestone underlies the Siwālik sandstones along the north-west slopes of the Khisor range.

The vegetation of the District is composed chiefly of scrub jungle, with a secondary element of trees and shrubs. The more common plants are *Flacourtia sapida*, *F. sepiaria*, several species of *Grewia*, *Zizyphus nummularia*, *Acacia Jacquemontii*, *A. leucophloea*, *Alhagi camelorum*, *Crotalaria Burhia*, *Prosopis spicigera*, several species of *Tamarix*, *Nerium odorum*, *Rhazia stricta*, *Calotropis procera*, *Periploca aphylla*, *Tecoma undulata*, *Lycium europaeum*, *Withania coagulans*, *W. somnifera*, *Nannorhops Ritchieana*, *Fagonia Tribulus*, *Peganum Harmala*, *Calligonum polygonoides*, *Polygonum aviculare*, *P. plebejum*, *Rumex vesicarius*, *Chrozophora plicata*, and species of *Aristida*, *Anthistiria*, *Cenchrus*, and *Pennisetum*.

Mārkhor and *uriāl* are found in the hills, and there are a few leopards round Sheikh Budīn, and wolves and hyenas are occasionally seen. Otters are common on the banks of the Indus. Among birds the great bustard is rare, but the lesser bustard is common on the *pat*. One or two kinds of eagle are seen in the hills, and the lämmergeyer is fairly common on Sheikh Budīn.

The climate is drier than that of either Bannu or Dera Ghāzi Khān, and the maximum temperature seems to have increased of late years. Thirty years ago the thermometer never rose above 110°, while the hot season never passes now without 116° or even more being registered. The winter is cold and bracing. The frost is so severe that mango-trees cannot be grown in the open without a covering. The District on the whole is fairly healthy, though the autumn fever sometimes takes a malignant form.

The annual rainfall is slight, averaging 10 inches at head-quarters. The greatest fall of late years was 24 inches in 1897–8 at Sheikh Budīn, while the least recorded during any one year was 0·8 inch at Tānk in 1888–9.

History.

The earliest traditions current in this remote quarter refer to its colonization by immigrants from the south, who found the country entirely unoccupied. The Baluchi settlers, under Malik Sohrāb, arrived in the District towards the end of the fifteenth century. His two sons, Ismail Khān and Fateh Khān, founded the towns which still bear their names. The Hot

family, as this Baluchi dynasty was termed, in contradistinction to the Mirāni house of Dera Ghāzi Khān, held sway over the Upper Derajāt for 300 years, with practical independence, until reduced to vassalage by Ahmad Shāh Durrāni about 1750. In 1794 Shāh Zamān, then occupying the Durrāni throne, conferred the government of this dependency, together with the title of Nawāb, upon Muhammad Khān, an Afghān of the Sadozai tribe, related to the famous governors of Multān. Muhammad Khān became master of the whole District, together with a considerable tract to the east of the Indus. He died in 1815, after a prosperous reign of twenty-two years. His grandson, Sher Muhammad Khān, succeeded to the principality, under the guardianship of his father, the late Nawāb's son-in-law. He was soon dispossessed of his territories east of the Indus by Rānjīt Singh, and retired across the river to Dera Ismail Khān, retaining his dominions in the Derajāt for fifteen years, subject to a quit-rent to the Sikhs, but otherwise holding the position of a semi-independent prince. His tribute, however, fell into arrears; and in 1836 Nao Nihāl Singh crossed the Indus at the head of a Sikh army, and annexed the District to the territories of Lahore. The Nawāb received for his maintenance an assignment of revenue, a portion of which is still retained by his descendants, together with their ancestral title.

Under Sikh rule, the Upper Derajāt was farmed out to the Dīwān Lakhi Mal, from whom it passed to his son, Daulat Rai. British influence first made itself felt in 1847, when Lieutenant (afterwards Sir Herbert) Edwardes, being dispatched to the frontier as the representative of the Lahore Darbār, effected a summary assessment of the land revenue. In the succeeding year, levies from Dera Ismail Khān and Bannu followed Edwardes to Multān, and served loyally throughout the war that ended in the annexation of the Punjab. The District then passed quietly under British rule. On the first subdivision of the Province Dera Ismail Khān became the head-quarters of a District, which originally included Bannu also. In 1861 Bannu was entrusted to a separate officer, and the southern half of Leiah District, consisting of the Bhakkar and Leiah *tahsīls* of the present Miānwāli District in the Punjab, was incorporated with Dera Ismail Khān. In 1857 some traces of a mutinous spirit appeared among the troops in garrison at the head-quarters station; but the promptitude and vigour of the Deputy-Commissioner, Captain Coxe, loyally aided by a hasty levy of local horse, averted the danger without serious difficulty. In 1870 the District attracted for a time a melancholy notoriety through the death of Sir Henry Durand, Lieutenant-Governor of the Punjab, who was crushed against an arch and precipitated from his elephant as he entered a gateway in the town of Tānk. His remains were interred at Dera Ismail Khān. The Bhakkar and Leiah *tahsīl* and thirty-two

villages of the Kulāchi *tahsīl* were detached from the District on the formation of the North-West Frontier Province in 1901.

Population.

Dera Ismail Khān District contains 3 towns and 409 villages. The population at the last three enumerations was: (1881) 203,741, (1891) 229,844, and (1901) 247,857. During the last decade it increased by 8 per cent., the increase being greatest in the Tānk *tahsīl* and least in Kulāchi. The District is divided into three *tahsīls*, the head-quarters of which are at the places from which each is named. Statistics for 1901 are shown below:—

Tahsīl.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Dera Ismail Khān	1,699	1	250	144,337	85	+ 7·9	7,630
Kulāchi	1,509	1	81	55,053	36	+ 5·3	2,116
Tānk	572	1	78	48,467	85	+ 10.8	2,368
Total	3,780	3	409	247,857	66	+ 7·8	12,114

The towns are the municipalities of DERA ISMAIL KHĀN, the administrative head-quarters of the District, and KULĀCHI, and the 'notified area' of TĀNK. Muhammadans number 213,816, or more than 87 per cent. of the total; Hindus, 29,434; and Sikhs (including the garrison), 4,362. The density is very low. The Indus valley supports a considerable population, but the *dāman* is very thinly inhabited. Along the foot of the hills to the west, Pashtū is spoken; elsewhere Jatkī, a mixture of Punjābi and Sindī.

Pathāns number 73,000, or less than 30 per cent. of the population, an unusually small proportion in a frontier District; they are returned under 26 subdivisions, no one of which preponderates, as do various clans of the Utmānzai and Ahmadzai in Bannu: the Marwats (8,000) are the largest group, while other well-known names are the Sulaimān Khel (5,000) and the Bhittannis (6,000). The large number of Baluchis (21,000) is significant of the remoteness of Dera Ismail Khān from Afghānistān proper. Jats, who cluster in the Indus valley, number 58,000, practically all Muhammadans. Saiyids return 5,000 and Awāns 6,000; Khokhars, Rājputs, and Arains 3,000 each. Of the commercial and money-lending classes, only the Aroras, who number 23,000, appear in strength, the Khattrīs returning 2,000; Shaikhs, who mostly live by trade, number 5,000. Of the artisan classes, the Mochīs (shoemakers and leather-workers, 5,000), Tarkhāns (carpenters, 4,000), and Kumhārs (potters, 3,000), are the most important; and of the menials, the Chūhrās and Kutānas (sweepers, 6,000), Machhis (fishermen, bakers, and water-carriers 4,000), and Chhīmbas and Dhobis (washermen,

4,000). The Mallāhs (boatmen, 3,000) and Kaneras (a fishing tribe, 2,000) are also worth mention. Agriculture supports 50 per cent. of the population.

There were 68 Christians in 1901. The Church Missionary Society opened a branch at Dera Ismail Khān in 1861. The Church of England Zanāna Mission maintains a dispensary in the same town. The Church Missionary Society has hospitals at Dera and Tānk, and also maintains a high school at Dera.

Agriculture.

The District is naturally divided into five tracts, each peculiar in the quality of its soil and the nature of its cultivation. In the *dāman* the soil is a hard clay, and cultivation is carried on in embanked fields, largely assisted by water from streams, hill torrents, or from the surface drainage. The Paniāli tract, including the Largi valley and the Paniāli Tal, has a sandy soil with cultivation depending chiefly on rain. In the hilly lands of the Khisor, Nīla Koh, and Bhittanni ranges the cultivation depends entirely on rain. The *kachi* or alluvial land of the Indus is cultivated either by means of wells or with the aid of the river floods. The fifth tract is known as the Rug-Pahārpur tract and in parts resembles the *kachi*, but is mainly dependent for irrigation on wells and canals and the drainage from the Khisor hills. The spring harvest (which in 1903–4 accounted for 61 per cent. of the area harvested) is sown from the middle of September to the middle of January; the autumn harvest chiefly in June, July, and August.

The District is held almost entirely on *pattīdāri* and *bhaiyāchārā* tenures, *zamīndāri* lands covering about 250 square miles, and lands leased from Government about 24·5 square miles. The staple crops are wheat and *bājra*, covering 176 and 143 square miles respectively in 1903–4, or 34 and 28 per cent. of the net area cultivated. Gram and *jowār* (7 square miles each) are grown to a much smaller extent. The following table gives the main agricultural statistics in 1903–4, areas being in square miles:—

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.	Area not available for cultivation
Dera Ismail Khān	1,699	416	109	790	49
Kulāchi . .	1,509	200	21	717	59
Tānk . . .	572	171	103	203	20
Total	3,780	787	233	1,710	128

The area under cultivation increased only from 754 square miles in 1877–8 to 787 square miles in 1903–4, showing that cultivation is practically stationary. Advances under the Land Improvement Loans Act are but little sought after; during the five years ending 1902–3, only

Rs. 5,790 was advanced under this head; when taken they are generally applied to the construction of embankments. During the same period Rs. 1,03,505 was advanced for the purchase of bullocks and seed. The sums advanced under the Acts in 1903–4 were respectively Rs. 460 and Rs. 21,000.

The District is not adapted to cattle-breeding owing to the deficiency of pasture, and the local breed is small. Buffaloes, however, are largely kept in the Indus lowlands, where their milk, and the *ghī* made from it, play an important part in the economy of the villagers. Camels are extensively bred in the *dāman*, and large numbers of Powinda camels, which are superior to those bred in the District, graze in it during the cold season. A good many sheep of the fat-tailed breed are also grazed here. The District possesses many horses, which are of a fair breed though small. The Civil Veterinary department maintains two horse and one donkey stallion, and a pony stallion is kept by the District board. A veterinary hospital has recently been opened at Dera Ismail Khān.

Of the total cultivated area in 1903–4, 135·5 square miles, or 4 per cent., were classed as irrigated. Of this area, 11·2 square miles were irrigated by wells and 124·3 square miles by canals. In addition, 97·1 square miles, or 13 per cent. of the cultivated area, were subject to inundation. Irrigation from wells is confined to the *kachi* tract bordering the Indus. In 1903–4, 833 masonry wells were in use, all worked with Persian wheels by cattle, besides 75 unbricked and lever wells. The canals are all private property, and are chiefly cuts which divert the water of the streams and torrents upon the fields. An inundation canal from the Indus to irrigate more than 30,000 acres has lately been begun, which is estimated to cost 7 lakhs.

The forests consist of 6 square miles of military 'reserved' forest, and 137 square miles of 'unclassed' forests under the Deputy-Commissioner, from which the revenue in 1903–4 was Rs. 5,440. The District is very poorly wooded, the nearest approach to true forest being the tamarisk jungles of the Indus riverain.

The only important mineral product is limestone, which exists abundantly, but is little utilized commercially. Oil is found at Mughalkot, where it issues from the sandstones at the base of the Nummulitic series. The lower hills contain much gypsum and alum; naphtha and saltpetre occur in the Sheikh Budīn range.

Trade and communications.

The manufactures of the District are not important. Coarse cotton cloth is woven in many villages and in Dera Ismail Khān town, where *lungīs* of creditable workmanship are also made. Turned and lacquered woodwork of remarkable excellence of design is made at Dera Ismail Khān and Pahārpur.

Commercially the District is only of importance as lying across the routes of the trade carried on between India and Khorāsān by travelling Powinda merchants. The Powinda caravans for the most part enter it by the Gomal Pass in October, and, passing into India, return in March and April. The principal articles carried are silk, *charas*, gold and silver thread, and furs from Bokhāra, fruits and wool from Ghazni and Kandahār, and madder, wool, *ghī*, tobacco, and asafoetida from Ghazni; the return trade consisting of indigo, cotton piece-goods, metals, sugar, salt, shoes, and leather. This trade, however, does not affect the District directly, as the Powindas very seldom unpack any of their wares within it. The District imports piece-goods, hides, salt, and metals, and exports wheat and great millet, the export trade passing down the Indus to Multān, Sukkur, and Karāchi. The chief centres of local trade are Dera Ismail Khān town, Tānk, and Kulāchi.

The Indus and its main branches are navigable, and carry a good deal of traffic. The river is crossed at Dera Ismail Khān by a steam ferry in the hot season, and a bridge of boats in the winter, and by nine other ferries. The station of Daryā Khān on the North-Western Railway lies in Miānwāli District on the east bank of the Indus, opposite Dera Ismail Khān. There are 546 miles of roads in the District, of which 109 miles are metalled.

Famine.

The District was classed by the Irrigation Commission of 1903 as one of those in which the normal rainfall is so deficient that cultivation is almost impossible without irrigation, and which therefore are not considered as liable to famine. The area of crops that matured in the famine year 1899–1900 amounted to 78 per cent. of the normal.

Administration.

The Deputy-Commissioner is aided by an Assistant and three Extra-Assistant Commissioners. One Assistant Commissioner commands the border military police, and an Extra-Assistant Commissioner is in charge of the Tānk subdivision, while another Extra-Assistant Commissioner holds charge of the District treasury. Each of the three *tahsīls* is under a *tahsīldār* and a *naib-tahsīldār*, and the Tānk *tahsīl* forms a subdivision.

Civil judicial work is disposed of by a District Judge, who is also District Judge of Bannu, where the court is held. Both he and the District Magistrate are supervised by the Divisional and Sessions Judge of the Derajāt Civil Division. A Munsif is stationed at head-quarters. There is little violent crime, but cattle-stealing, mostly unreported, is an almost universal practice, especially in the *kachi* tract.

The revenue history of the several *tahsīls* differs considerably. Previous to annexation Tānk formed a separate government under Nawāb Sarwar Khān, paying $1\frac{1}{4}$ to $1\frac{1}{2}$ lakhs revenue. Herbert Edwardes leased the *tahsīl* to the Nawāb for five years at an annual rent of

one lakh. The Dera Ismail Khān and part of the Kulāchi *tahsīls* were divided into ten blocks (*tālukas*) for revenue purposes, in each of which one of the leading men superintended the collections. In 1848 Edwardes himself assessed all of the Kulāchi *tahsīl* which was not assigned, though very roughly. Summary settlements were made in 1850–1 in the Dera Ismail Khān and Kulāchi *tahsīls*, and in 1853–4 in Tānk, as the Nawāb was heavily in arrears and consequently had been deprived of his lease. All three *tahsīls* (except the Kulāchi *tāluka*) were again settled in 1857 for seven years. The earlier summary settlement realized 2·4 lakhs, and that from 1857 to 1862 realized 2·5 lakhs, rising to 2·7 lakhs. Between 1873 and 1879 a regular settlement was made, and fluctuating assessments were introduced below the hills and in the lands liable to floods. The demand amounted to three lakhs, of which $1\frac{1}{4}$ lakhs was fluctuating revenue. A revised assessment began in 1898. It is intended to extend the fluctuating system of land revenue to the greater part of the District. The new settlement is not yet altogether complete; but the demand under the head of fixed land revenue has been reduced to Rs. 35,800, while the greatest amount of land revenue payable to Government in a favourable year will be 2·88 lakhs, of which rather more than one lakh is assigned. Fixed rates at the last settlement fluctuated between Rs. 2–3–0 and 4 annas per acre on 'wet' land. Crop rates varied from R. 1 to 8 annas.

The following table shows total collections of revenue and of land revenue alone, in thousands of rupees:—

	1880–1.*	1890–1.*	1900–1.	1903–4.
Land revenue . .	1,75	4,64	2,05	1,98
Total revenue . .	5,93	6,33	2,42	2,50

* These figures are for the old District, including the Bhakkar and Leiah *tahsīls*.

The District contains two municipalities, DERA ISMAIL KHĀN and KULĀCHI, and one 'notified area,' TĀNK. Outside these areas, local affairs are managed by a District board. Its income, mainly derived from local rates, amounted in 1903–4 to Rs. 43,400. The expenditure in the same year was Rs. 41,400, the mail-cart service forming the largest item.

The regular police force consists of 483 of all ranks, of whom 79 are municipal police, 41 mounted men, and 13 trackers. Village trackers are also frequently employed. There are 8 police stations, 3 outposts, and 4 road-posts. The border military police number 607 of all ranks, including 125 mounted men. They are commanded by an Assistant Commissioner, directly under the orders of the Deputy-Commissioner, and occupy fourteen posts, of which six are actually in the Shirāni

country, a political apanage of the District, though administratively distinct from it. The jail at head-quarters has accommodation for 497 prisoners.

The average of literacy is high for the North-West Frontier Province, on account of the large Hindu element in the population. In 1901, 9·3 per cent. males and 1·5 per cent. females were returned as able to read and write, the proportion of literate persons of both sexes being 48·6 among Sikhs, 26·6 among Hindus, and 1·5 among Muhammadans, who form the agricultural population.

The total number of pupils under instruction was 893 in 1880–1, 3,244 in 1890–1, and 8,943 in 1903–4. In the last year there were 4 secondary and 25 primary (public) schools, and 8 advanced and 99 elementary (private) schools, with 289 girls in the public and 491 in the private schools. Dera Ismail Khān town possesses two Anglo-vernacular high schools. Of the indigenous schools, the Hindu girls' school at Dera Ismail Khān deserves notice. It was opened in 1881–2, and is maintained by the municipality. The total expenditure on education in 1903–4 was Rs. 23,400, of which Rs. 6,500 was contributed by District funds, Rs. 7,400 by the municipalities, and Rs. 6,600 by fees.

Besides the Dera Ismail Khān civil hospital, the District contains five outlying dispensaries. In 1904 the number of cases treated was 66,633, including 905 in-patients, and 3,088 operations were performed. The income was Rs. 17,600, the greater part of which came from Local funds.

The number of successful vaccinations in 1903–4 was 8,928, representing 33 per 1,000 of the population.

[*District Gazetteer*, 1878 (under revision).]

Dera Ismail Khān Tahsīl.—Head-quarters *tahsīl* of Dera Ismail Khān District, North-West Frontier Province, lying between 31° 18′ and 32° 32′ N. and 70° 31′ and 71° 22′ E., with an area of 1,699 square miles. It consists of a bare plain, generally barren except for a few tamarisks and acacias, but covered with crops in favourable seasons. Water is so scarce that in the hot season the people often have to desert their villages and camp with their cattle by the Indus. The population in 1901 was 144,337, compared with 133,809 in 1891. The head-quarters are at DERA ISMAIL KHĀN TOWN (population, 31,737), and the *tahsīl* also contains 250 villages. The land revenue and cesses in 1903–4 amounted to Rs. 87,860.

Dera Ismail Khān Town.—Head-quarters of the District and *tahsīl* of Dera Ismail Khān, North-West Frontier Province, situated in 31° 49′ N. and 70° 55′ E. Population (1901), 31,737, of whom 18,662 were Muhammadans, 11,486 Hindus, and 1,420 Sikhs. Of the total, 3,450 live in the cantonment. The town lies 4½ miles from the

right bank of the Indus, 200 miles west of Lahore, and 120 miles north-west of Multān. It was founded towards the end of the fifteenth century by Ismail Khān, a son of the Baloch adventurer Malik Sohrāb, who called the town after his own name. The original town was swept away by a flood in 1823, and the existing buildings are all of quite modern construction. It contains two bazars, the Hindu and Muhammadan population living in separate quarters. The town stands on a level plain, with a slight fall to the river, but is badly drained. It is surrounded by a thin mud wall, with nine gates, enclosing an area of about 500 acres. The cantonment, which lies south-east of the town, has an area of $4\frac{3}{4}$ square miles, excluding the portion known as Fort Akālgarh on the north-west side. The civil lines are to the south. The Derajāt Brigade has its winter head-quarters at Dera Ismail Khān, and the garrison consists of a mountain battery, a regiment of Native cavalry, and three regiments of Native infantry. Detachments from these regiments help to garrison the outposts of Drazinda, Jandola, and Jatta. The municipality was constituted in 1867. The income during the ten years ending 1902–3 averaged Rs. 55,000, and the expenditure Rs. 53,000. The income and expenditure in 1903–4 were Rs. 55,500 and Rs. 55,800 respectively. The chief source of income was octroi (Rs. 48,000); and the chief items of expenditure were conservancy (Rs. 8,785), education (Rs. 7,246), hospitals and dispensaries (Rs. 6,302), public safety (Rs. 7,733), public works (Rs. 2,143), and administration (Rs. 5,546). The receipts and expenditure of cantonment funds during the ten years ending 1902–3 averaged Rs. 2,700 and Rs. 2,800 respectively.

The local trade of Dera Ismail Khān is of second-rate importance, but some foreign traffic with Khorāsān passes through it. Powinda caravans of Afghān merchants traverse the town twice a year on their road to and from India; and, with the increasing security of the Gomal route, these caravans are yearly swelling in numbers. The chief imports are English and native piece-goods, hides, salt, and fancy wares; and the exports, grain, wood, and *ghī*. The local manufactures are *lungīs* and lacquered woodwork. The town possesses a civil hospital; its chief educational institutions are two aided Anglo-vernacular high schools, one maintained by the Church Missionary Society and the other by the Bharatri Sabha, and an Anglo-vernacular middle school maintained by the municipality.

Derajāt.—The local name of the level plain between the Indus and the Sulaimān range, lying between 29° 30′ and 34° 15′ N. and 69° 15′ and 72′ E., in the Punjab and North-West Frontier Province. The tract includes, and derives its name from, the three Deras: DERA ISMAIL KHĀN, Dera Fateh Khān, and DERA GHĀZI KHĀN. It extends north to the Sheikh Budīn range, which divides it from the Marwat

plain, and south to the town of Jāmpur, having thus a length of 325 miles. Its breadth averages 50 miles. The Derajāt owes its existence as an historical area to the Baloch immigration in the fifteenth century. Sultān Husain, the Langāh sovereign of Multān, being unable to hold his trans-Indus possessions, called in Baloch mercenaries, and assigned these territories to Malik Sohrāb Dodai in *jāgīr*. Sohrāb's sons, Ismail and Fateh Khān, founded the two *deras* or 'settlements' named after them; while Hāji Khān, the head of the old Mirāni tribe of the Balochs, who had also entered the service of the Langāhs, assumed independence in the reign of Mahmūd, Sultān Husain's grandson, and founded Dera Ghāzi Khān, naming it after his son and successor. When Hāji Khān died in 1494, the tract was a deserted waste but contained a few isolated towns. The Mirānis soon came into conflict with the Nāhars, who ruled the country on the Indus to the south, the boundary between the rival powers lying north of Rājanpur; but the Mirānis also held some territory east of the Indus in the modern District of Muzaffargarh. On Bābar's conquest of Northern India in 1526 the Mirānis submitted to him, and at his death the Derajāt became a dependency of his son Kāmrān, the ruler of Kābul. Under Humāyūn the Baloch immigration increased, and they gradually pushed the Nāhars farther south. All the Baloch tribes acknowledged the overlordship of the Mirāni Nawābs, who ruled for about fifteen generations at Dera Ghāzi Khān, taking alternately the style of 'Hāji' and 'Ghāzi Khān.' At Dera Ismail Khān ruled the Hot Baloch chiefs, who bore the title of Ismail Khān from father to son and also held Daryā Khān and Bhakkar, east of the Indus. Early in the eighteenth century the Mirānis lost their supremacy, being overwhelmed by the Kalhoras of Sind; and when in 1739 Nādir Shāh acquired all the territory west of the Indus, he made the Mirāni Wazīr, Mahmūd Khān Gūjar, governor in Dera Ghāzi Khān under the Kalhora chief, who also became his vassal. Under Ahmad Shāh Durrāni the Kalhoras and the Mirānis, now in a state of decadence, contended for possession of Dera Ghāzi Khān, but Mahmūd Khān Gūjar appears to have been its real governor. He was succeeded by his nephew, who was killed in 1779, and the Durrānis then appointed governors direct for a period of thirty-two years. Meanwhile the last of the Hot chiefs of Dera Ismail Khān had been deposed in 1770, and his territories also were administered from Kābul. In 1794 Humāyūn Shāh attempted to deprive Zamān Shāh Durrāni of his kingdom, but he was defeated and fell into the hands of Muhammad Khān Sadozai, governor of the Sind-Sāgar Doāb. As a reward for this capture, Zamān Shāh bestowed the province of Dera Ismail Khān on Nawāb Muhammad Khān, who governed it from Mankerā by deputy. His son-in-law, Hāfiz Ahmad Khān, surrendered at Mankerā to Ranjīt Singh in 1821, and at the same time tribute was

imposed by the Sikhs on the chiefs of Tānk (Sarwar Khān) and Sāgar. Dera Fateh Khān was also occupied; but Dera Ismail Khān, to which Hafiz Ahmad Khān was permitted to retire on the fall of Mankerā, remained independent till 1836, when Nao Nihāl Singh deposed Muhammad Khān, the son of Hāfiz Ahmad Khān, and appointed Dīwān Lakhi Mal to be Kardār. Dīwān Lakhi Mal held this post till his death in 1843, and was succeeded by his son Dīwān Daulat Rai, who enjoyed the support of the Multāni Pathān Sardārs. He was bitterly opposed by Malik Fateh Khān Tiwāna, who had also procured a nomination as Kardār from the Sikh Durbar. These rivals contended for supremacy with varying success until 1847, when the Dīwān then in possession was deposed on the recommendation of Herbert Edwardes, who appointed General Van Cortlandt to be Kardār. The Derajāt passed to the British in 1849, and is now divided between the Districts of Dera Ghāzi Khān in the Punjab and Dera Ismail Khān in the North-West Frontier Province.

Dera Nānak.—Town in the Batāla *tahsīl* of Gurdāspur District, Punjab, situated in 32° 2′ N. and 75° 7′ E., on the south bank of the Rāvi, 22 miles from Gurdāspur town. Population (1901), 5,118. Bāba Nānak, the first Sikh Gurū, settled and died at Pakhoki, a village on the north bank of the Rāvi, where his descendants, the Bedīs, lived until the Rāvi washed it away about 1744. They then built a new town south of the river, and called it Dera Nānak after the Gurū. The town contains a handsome Sikh temple called the Darbār Sāhib, to which Sikhs from all parts of the Punjab make pilgrimages. Four fairs are held at it in the year, and it enjoys a perpetual *jāgīr* worth more than Rs. 2,000. A second temple, known as the Tāli Sāhib, from a large *tāli* or *shīsham* tree which stood near it, was carried away by an inundation in 1870, but has since been rebuilt at a small village close by. A third temple is known as the Cholā Sāhib. The municipality was created in 1867. The income and expenditure during the ten years ending 1902–3 averaged Rs. 7,900 and Rs. 7,700 respectively. The income in 1903–4 was Rs. 7,700, chiefly from octroi; and the expenditure was Rs. 7,300. The commercial importance of the town has much declined since the opening of the railway, but it is still the centre of a considerable shawl-embroidering industry. It has a municipal Anglo-vernacular middle school and a Government dispensary.

Derāpur.—*Tahsīl* of Cawnpore District, United Provinces, conterminous with the *pargana* of the same name, lying between 26° 20′ and 26° 37′ N. and 79° 34′ and 79° 55′ E., with an area of 308 square miles. Population increased from 140,008 in 1891 to 149,593 in 1901. There are 275 villages, but no town. The demand for land revenue in 1903–4 was Rs. 2,97,000, and for cesses Rs. 48,000. The density of

population, 486 persons per square mile, is below the District average. On the north the *tahsīl* is bounded by the Rind, while the Sengar flows near the southern boundary. The northern portion is fertile, but the land on both banks of the Sengar is furrowed by deep ravines. In 1903-4 the area under cultivation was 186 square miles, of which 78 were irrigated. The Etāwah branch of the Lower Ganges Canal serves the area north of the Sengar, and the Bhognīpur branch part of the area south of that river. Canals supply nearly two-thirds of the irrigated area, and wells most of the remainder.

Derbhavti.—Petty State in the DĀNGS, Bombay.

Derdi Jānbai.—Petty State in KĀTHIĀWĀR, Bombay.

Derol.—Petty State in MAHĪ KĀNTHA, Bombay.

Dero Mohbat.—*Tāluka* in Hyderābād District, Sind, Bombay, lying between 24° 58′ and 25° 18′ N. and 68° 32′ and 69° 19′ E., with an area of 604 square miles. The population in 1901 was 46,919, compared with 41,823 in 1891. The density is 78 persons per square mile, which is the lowest figure in any part of the District, except Sakrand. The number of villages is 137, of which Mātli is the head-quarters. Land revenue and cesses amounted in 1903-4 to nearly 2·4 lakhs. The *tāluka* is very uneven, consisting of long undulations of no great height, and is remarkable for large and scattered mounds. The chief crops are rice and *bājra*, cotton and wheat being also grown to some extent. Part of the irrigation is from wells.

Desert Canal (formerly known as the Maksūda Wah).—An important channel in Sind, Bombay, issuing from the Indus, which it taps close to the village of Kashmor. It runs 75 miles into the desert tract west of Kashmor, irrigating the lands of the Upper Sind Frontier District and Baluchistān. About twenty-two canals branch off the main system, the principal being the Murād (6 miles), the New Falls (25 miles), and the New Frontier Rajwan (23 miles). The aggregate cost of these works up to the end of 1903-4 amounted to about 26½ lakhs; the gross receipts in the same year were over 2 lakhs, and the total charges (exclusive of interest) about 1½ lakhs. The gross income was thus 8·27 per cent. on the capital expended, and the net receipts 3·25 per cent. The area irrigated was 345 square miles.

Deūlgaon Rājā.—Town in the Chikhlī *tāluk* of Buldāna District, Berār, situated in 20° 1′ N. and 76° 5′ E. Population (1901), 6,293. It derives its distinctive appellation from the Jādon Rājās of SINDKHED, by one of whom it was founded, and who built a temple of Bālāji, where an annual fair, the largest in Berār, is held in October.

Devakottai.—Town in the Tiruvādānai *tahsīl* of the Rāmnād estate, Madura District, Madras, situated in 9° 57′ N. and 78° 51′ E. Population (1901), 9,503. The place is chiefly interesting as being the home of the wealthy trading community of Nāttukottai Chettis, and

abounds in the fine residences which these people are fond of constructing for themselves.

Devāla.—Village in the Gūdalūr *tāluk* of the Nīlgiri District, Madras, situated in 11° 29′ N. and 76° 23′ E., 4 miles from the head of the Karkūr *ghāt* leading down to Malabar, on the high road between Gūdalūr and Vayittiri. It was once an important centre for the south-east Wynaad gold-fields, and boasted a hotel and a telegraph office, while the hills around were studded with bungalows inhabited by the European employés of the gold companies. It was then made the head-quarters of the Head Assistant Collector of the District. With the decline of the gold industry it has dwindled to a hamlet with a population (1901) of 495; and its principal buildings at present are a native resthouse, a police station, and a travellers' bungalow.

Devalpalli.—Former name of MIRIALGUDA *tāluk*, Nalgonda District, Hyderābād State.

Devanhalli Tāluk.—Northern *tāluk* of Bangalore District, Mysore, lying between 13° 5′ and 13° 22′ N. and 77° 32′ and 77° 50′ E., with an area of 235 square miles. The population in 1901 was 60,537, compared with 53,582 in 1891. The *tāluk* contains two towns, DEVANHALLI (population, 6,649), the head-quarters, and VADIGENHALLI (4,008); and 284 villages. The land revenue demand in 1903–4 was Rs. 1,21,000. There are a few small hills and rocks to the north and west; but the country is chiefly open, fertile, and well supplied with good water. The upper course of the Ponnaiyār lies on the eastern boundary. In the north are many *talpargis* or surface springs. Until prohibited, poppy was cultivated for opium; potatoes grow well.

Devanhalli Town.—Head-quarters of the *tāluk* of the same name in Bangalore District, Mysore, situated in 15° 13′ N. and 77° 43′ E., 23 miles north of Bangalore city. Population (1901), 6,649. The fort was erected in 1501 by one of the AVATI family, and captured by the ruler of Mysore in 1749, its siege being the operation in which Haidar first came into notice. He obtained the command of one of the bastions, and here his son Tipū was born in 1753. The place was taken by the British under Lord Cornwallis in 1791. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 2,700. In 1903–4 they were Rs. 3,700 and Rs. 4,100.

Devaprayāg.—Village in the State of Tehrī, United Provinces, situated in 30° 10′ N. and 78° 37′ E., at the confluence of the Alaknandā and Bhāgīrathi rivers, the combined stream being then called the Ganges; elevation, 2,265 feet. The point of junction forms one of the five sacred confluences in the hills, and is annually visited by many devout pilgrims. The village stands 100 feet above the water's edge, on the scarped side of a hill, which rises behind it to a height

of 800 feet. The great temple of Raghunāth, built of massive uncemented stones upon a terrace in the upper part of the town, consists of an irregular pyramid, capped by a white cupola with a golden ball and spire. The Brāhmans compute its age at 10,000 years. Religious ablutions take place at two basins excavated in the rock near the junction of the holy streams, one on the Alaknandā, known as the Vasishtkund, and another on the Bhāgīrathi, called the Brahmākund. An earthquake in 1803 shattered the temple and other buildings; but the damage was subsequently repaired through the munificence of Daulat Rao Sindhia. The place contains the head-quarters of a magistrate, a primary school, and about twenty shops.

Devarāyadurga.—Fortified hill, 3,940 feet high, and a hot-season resort, in Tumkūr District, Mysore, situated in 13° 23′ N. and 77° 12′ E. It is surrounded with hills and forest, consists of three terraces, and is well supplied with springs. Under the Hoysalas there was on this hill a town called Anebiddasari or Anebiddajari, which gave its name to the district below. The hill was in the possession of a local chief, and was called Jadakanadurga when captured, about 1696, by Chikka Deva Rājā of Mysore, who erected the present fortifications, and gave his own name to the hill, since shortened into Devarāyadurga. The temple of Durga Narasimha, on a terrace of the highest part, was built by Kanthīrava Rājā of Mysore.

Devargud.—Village in the Rānībennur *tāluka* of Dhārwār District, Bombay. *See* GUDDGUDDĀPUR.

Devarkonda.—South-western *tāluk* of Nalgonda District, Hyderābād State, separated from the Guntūr District of Madras by the Kistna river. Including *jāgīrs*, the population in 1901 was 100,059, and the area 760 square miles. In 1891 the population was 85,613. The *tāluk* contains 175 villages, of which 23 are *jāgīr*; and Devarkonda (population, 3,186) is the head-quarters. The land revenue in 1901 was 1·7 lakhs. The *tāluk* is very hilly in the west. Rice is largely cultivated, being irrigated from tanks and wells.

Devgarh Tāluka.—Southern *tāluka* of Ratnāgiri District, Bombay, lying between 16° 11′ and 16° 35′ N. and 73° 19′ and 73° 57′ E., with an area of 525 square miles. There are 119 villages, but no town. The population in 1901 was 143,750, compared with 128,708 in 1891. The increase of population is attributed partly to immunity from plague, and partly to the fact that at the date of the Census many mills in Bombay were closed and the hands had returned to their homes in Ratnāgiri. The density, 274 persons per square mile, is slightly below the District average. The demand for land revenue in 1903–4 was one lakh, and for cesses Rs. 6,000. The *tāluka*, about 26 miles long and 32 miles broad on an average, stretches from the sea-coast to the watershed of the Western Ghāts. At the north-west

corner the rocky headland of Vijayadurg juts out into the sea. The coast-line from Vijayadurg to the mouth of the Achra river, the southern point, is fairly regular, although intersected by creeks and small river estuaries. In the sandy coves along the coast lie fishing villages picturesquely secluded in groves of palm. The only pass into the Deccan of any importance is the Phonda route. The water-supply is fair for 20 miles inland. The soil is poor. The Vijayadurg creek is navigable for vessels drawing 7 feet of water as far as Vāghotan. Canoes can paddle up to Khārepātan, 24 miles from the sea. The annual rainfall, averaging 80 inches, is the lightest in the District.

Devgarh Village (1).—Port in the Devgarh *tāluka* of Ratnāgiri District, Bombay, situated in 16° 23′ N. and 73° 22′ E., 180 miles from Bombay. Population (1901), 1,761. It has a safe and beautiful land-locked harbour, at all times perfectly smooth. The average depth of water is 18 feet. The entrance, only three cables in width, lies close to the fort point. The position is said to have been fortified by the Angriās, a Marāthā pirate race, early in the eighteenth century, and was captured in 1818 by Colonel Imlack. In 1875 the head-quarters of the *tāluka* were moved here from Khārepātan. In 1903-4 the trade of the port amounted to 3·7 lakhs, of which 2 lakhs were imports and 1·7 lakhs exports. The place contains a Subordinate Judge's court and an Anglo-vernacular school.

Devgarh Village (2) (or Hareshwar).—Village in the State of Janjīra, Bombay, about 3 miles south of Srīvardan. Population (1901), 1,130. In the time of James Forbes (1771) the village was noted for the sacredness of the temple, the beauty of its women, and for having been the residence of the ancestors of the Peshwās. There is a temple sacred to Kāl Bhairav, who is said to cure all sickness caused by evil spirits. Two fairs are held in the year, one on the Mahāsivrātri (February) for one day, and the other from Kārtik-suddha (November). They are attended by about 3,500 persons, and on each occasion flowers, fruits, sweetmeats, toys, and bangles are brought for sale.

Devī Dhurā.—Station on the road between Almorā town and Champāwat, in Almorā District, United Provinces, situated in 29° 25′ N. and 79° 52′ E., 29 miles from Almorā town. Between two groups of colossal blocks of grey granite, which are sacred to Mahādeo, Varāhī Devī, and Bhīm Sen, is a celebrated temple where many goats and buffaloes are offered at a fair in June or July. Two boulders close by exhibit deep fissures and curious marks.

Devīkot.—Ruins in the Bālurghāt subdivision of Dinājpur District, Eastern Bengal and Assam, situated in 25° 11′ N. and 89° E., on the left bank of the Pūrnabhabā river, and possessing great archaeological interest. According to legend, this was the citadel of Bānnagar, the

fortress of an Asur or giant known as Bān Rājā. There are numerous Hindu remains in the shape of stone pillars and sculptures, and large mounds of brick ruins. The citadel is a quadrangle of 1,800 by 1,500 feet, surrounded by a high brick rampart, and enclosed on the south and east by a moat, which has been obliterated on the other sides by the Pūrnabhabā river. On the west face of the citadel is a large projection, which probably formed the outworks before the gate. In the centre is a great heap of bricks said to have been the Rājā's house, and on the east face is a gate with a causeway, about 200 feet long, leading across the ditch into the city; this was in the form of a square with sides about a mile long, and was surrounded by a rampart of brick and a ditch. Near Bānnagar are two great tanks known as the *Dhal* ('white') and the *Kāla* ('black') *Dīghi*; on the banks of the latter and in its vicinity are a number of Hindu temples also connected by tradition with this ruler.

In historical times Devīkot was the northern capital of the Muhammadan governors of Bengal, and it was here that Muhammad-i-Bakhtyār Khiljī died in 1206, after his ill-fated expedition into Tibet. There are the ruins of a mosque and the shrine of a *pīr* or saint, named Atā-ud-dīn or Atā Ullah, said to have been the spiritual guide of Muhammad. An inscription in the mosque gives the date as 1203, and it must therefore have been built immediately after the first Muhammadan conquest of Bengal. At the end of the fifteenth century it was the site of a strong military and administrative outpost under Alā-ud-dīn Husain.

[Martin, *Eastern India*, vol. ii, pp. 659–64; *Reports, Archaeological Survey of India*, vol. xv, pp. 95–104.]

Devikottai (*dīvu*, 'island,' and *kottai*, 'fort').—A ruined fort at the mouth of the Coleroon river in the Shiyāli *tāluk* of Tanjore District, Madras, situated in 11° 22′ N. and 79° 48′ E. It was captured by the East India Company in 1749 from Pratāp Singh, the Rājā of Tanjore, after two hazardous expeditions from Fort St. David, undertaken at the instance of Sayājī, a deposed Rājā, and was thus the first British possession in India obtained by conquest. The first expedition, under Captain Cope, proved unsuccessful owing to various mischances. On the second occasion a larger force under Major Stringer Lawrence effected the capture of the place. In the course of the siege Clive, then a lieutenant, had a narrow escape while leading the attack on the breach. The fort was a mile in circumference, with walls 18 feet high. No factory was established at the spot, and the fort was eventually abandoned on the approach of the French in 1758. The French in turn evacuated it after Eyre Coote's victory at Wandiwāsh, and it was regarrisoned by British troops in 1760. It has been almost completely destroyed by the floods of the Coleroon.

Devlāli.—Cantonment in the District and *tāluka* of Nāsik, Bombay. *See* DEOLĀLI.

Devlia.—Petty State in KĀTHIĀWĀR, Bombay.

Devrukh.—Head-quarters of the Sangameshwar *tāluka* of Ratnāgiri District, Bombay, situated in 17° 4′ N. and 73° 37′ E. Population (1901), 3,892. The place, which enjoys a good climate and a plentiful water-supply, contains the ordinary revenue offices and an English school.

Dewal.—Village in the Bīsalpur *tahsīl* of Pīlībhīt District, United Provinces, situated in 28° 25′ N. and 79° 56′ E. It lies on the western bank of a small channel called the Khawā or Katnī, which unites the Katnā to the Khanaut river; and on the opposite bank are situated two other villages, called Deoriā and Garh Gājana. An inscription found here, dated in A.D. 992, records the building of temples by a prince named Lalla of the Chhinda line; and the neighbourhood contains several mounds covering the remains of the city of Mayūta mentioned in the inscription. The Katnī appears to have been dug as a canal by the same prince.

[*Epigraphia Indica*, vol. i, p. 75.]

Dewalgaon.—Town in Buldāna District, Berār. *See* DEŪLGAON RĀJĀ.

Dewāngiri.—Village on the extreme northern boundary of Kāmrūp District, Eastern Bengal and Assam, situated in 26° 52′ N. and 91° 28′ E., among the outlying ranges of the Himālayas. It stands among natural surroundings of great beauty, about 2,000 feet above the level of the sea. At the time of the Bhutān War Dewāngiri fort was held by a strong British force, who evacuated it under somewhat discreditable conditions, when attacked by the enemy early in 1865. It was subsequently retaken with considerable loss to the enemy. Upwards of 100 were killed in a blockhouse, in which they barricaded themselves and declined to surrender. The inhabitants are Bhotiās subject to the British Government, and just beyond Dewāngiri a customs house is maintained by the Bhutān authorities on their side of the frontier. The village is not itself a centre of trade, but about one-third of the trade of the hills passes through it to the mart at SUBANKHĀTĀ.

Dewās States.—Twin treaty States in the Mālwā Political Charge of the Central India Agency, divided into a senior and a junior branch. The circumstances of the Dewās States are unusual. Though virtually two distinct chiefships with separate administrations, acting independently in most matters, they share the same capital town and possess only allotted shares of the same territory. Their territories, which are split up into several portions, situated in the Bhopāl and Mālwā Agency Political Charges, lie between 22° 16′ and 23° 53′ N. and 75° 34′ and 76° 46′ E., with a total area of 886 square miles. Details of each

branch will be found below. The States are bounded by portions of Gwalior, Indore, Bhopāl, Jaorā, and Narsinghgarh. Except the *pargana* of Bāgaud, the whole area lies on the Mālwā plateau, and is watered by the Chambal, Siprā, and Kālī Sind.

The chiefs of Dewās are Marāthā Ponwārs connected with the DHĀR house, Udājī Rao, the first of that line, having been first-cousin to Tukojī Rao and Jiwājī Rao, the founders of Dewās. Tukojī and Jiwājī were brothers, who came into Central India with the Peshwā, Bājī Rao I, in about 1728. In reward for services rendered, the Peshwā conferred several *parganas* on them, some of which their descendants still hold, while others have been lost. In 1818 a joint treaty was concluded between the British Government and Tukojī Rao II of the senior and Anand Rao II of the junior branch. The chiefs were required by the treaty to 'act by an union of authority and to administer their affairs through one public minister.' This arrangement gave rise to endless friction and was finally abandoned, each branch having its own minister. In 1836–7 the treaty obligation to provide a quota of troops was commuted into an annual money payment of Rs. 28,500, of which sum each branch pays half. In 1862 *sanads* of adoption were granted to the chiefs. In 1864 and 1890 all land required for railways was ceded by both branches. In 1881 all transit dues on salt were abandoned, and a compensatory cash payment of Rs. 412–8–0 was made in lieu of it to each branch. All remaining transit dues, except those on opium, were abolished in 1885.

The only place of any archaeological interest is SĀRANGPUR, chiefly famous as the capital of Bāz Bahādur of Mālwā. The village of Nāgda, 3 miles south of Dewās, is said to have been formerly the capital of this tract; and it shows signs of having once been a place of some size, numerous remains of Jain figures and Hindu temples lying in the neighbourhood.

Each of the States is administered by its own chief. The two administrations are entirely separate, except in regard to educational, medical, octroi, and excise matters, in which they work together. Neither branch has had its own currency. Since 1895 the British rupee has been legal tender. British copper coin is used, surcharged with the words 'Dewās State,' and the initials 'S.B.' or 'J.B.,' as the case may be. The chiefs under the treaty of 1818 ordinarily exercise full powers in judicial and all general administrative matters.

The chief articles of commerce are grain, oilseeds, cotton, and opium, which are taken to the railway at Indore for export.

Means of communication are supplied by the Agra-Bombay, Dewās-Ujjain, and Dewās-Bhopāl roads, towards the upkeep of which each branch pays Rs. 2,125 annually to the British Government. The new Nāgda-Muttra section of the Bombay, Baroda, and Central India Rail-

way will pass through the Alot and Gadgucha *parganas* of the senior branch and junior branch respectively. Altogether, 118 miles of road have been constructed and are maintained by the two States, of which 15 miles are metalled and 103 unmetalled. Combined post and telegraph offices have been opened at Dewās and Sārangpur, with branch offices at Alot, Padhānā, Pādlia, Ringnod, Barotha, and Rāghogarh.

The States own 11 schools jointly, one being a high school. Besides these, the senior branch contains 21 primary schools, including 3 private schools, and the junior 20, including 5 private schools. The number of boys attending these is 1,339. The total expenditure on education for both branches amounts to Rs. 16,000.

Hospitals at Dewās and Sārangpur are owned jointly. A dispensary is maintained at the head-quarters of each *pargana*. The total medical expenditure for both branches amounts to Rs. 13,000.

Senior Branch.—The founder of the senior branch was Tūkojī Rao I. He died in 1753, and was succeeded by his adopted son Krishnājī Rao, who fought in the disastrous battle of Pānīpat in 1761, and was followed in 1789 by his adopted son Tukojī Rao II. The fortunes of both branches fell very low at this time, owing to the depredations of the Pindāris, Sindhia, and Holkar. Krishnājī Rao II, who succeeded Rukmāngad Rao in 1860 by adoption, was a bad administrator and plunged the State in debt, necessitating its being placed under superintendence. He was succeeded in 1899 by the present chief, Tukojī Rao III, adopted from another branch of the family, and educated at the Daly College, Indore, and Mayo College, Ajmer. The ruler bears the titles of His Highness and Rājā, and receives a salute of 15 guns.

The population was: (1881) 73,940, (1891) 82,389, and (1901) 62,312, giving a density of 139 persons per square mile. It has decreased by 24 per cent. in the last decade. Hindus number 53,512, or 85 per cent.; and Musalmāns, 7,176, or 12 per cent. Besides the two towns DEWĀS (population, 15,403) and SĀRANGPUR (6,339), shared by both branches, there are 238 villages. The Mālwī dialect of Rājasthānī is the language in ordinary use. Agriculture supports 36 per cent. of the population, and general labour 29 per cent.

The territory of this branch has an area of 446 square miles, of which 132 square miles, or 29 per cent., have been alienated in land grants. About 220 square miles, or 49 per cent. of the total, are cultivated, of which 12 square miles are irrigated; cultivable land occupies 133 square miles, and forest 27 square miles, the rest being waste. Of the total cropped area, *jowār* occupies 85 square miles, or 37 per cent.; wheat, 32 square miles; oilseeds, 26 square miles; cotton, 17 square miles; and poppy, 6 square miles.

For administrative purposes the State is divided into five *parganas*, each under a *kamāsdār* (*kamāvisdār*), with head-quarters at Dewās, Alot,

Sārangpur, Rāghogarh, and Bāgaud. The present chief being a minor, the administration is conducted by a Superintendent, under the direct control of the Political Agent in Mālwā.

The total revenue is about 3·5 lakhs, of which 2·9 lakhs is derived from land, Rs. 33,000 from customs dues, Rs. 10,000 from duty on opium, and Rs. 7,700 from *tānka*. The land alienated in *jāgīrs* produces an income of about Rs. 90,000. The main heads of expenditure are: chief's establishment, Rs. 76,000; collection of revenue, Rs. 69,000; and general administration, Rs. 24,000. The incidence of the land revenue demand is Rs. 3-5-7 per acre of cultivated area, and Rs. 1-9-9 per acre of the total area. All collections are made in cash.

The State forces consist of 62 cavalry, 79 infantry, 69 *sibandi*, and 18 gunners with two guns. A force of 265 regular police and 306 rural police is kept up. There is a Central jail at Dewās.

The first survey was made in 1830, only the cultivated land being measured. A plane-table survey was made in 1894, and maps were prepared for every village. Owing, however, to successive bad years, the work of settlement is at present in abeyance.

Junior Branch.—Jiwājī Rao, the founder of the junior branch, died in 1775, and the later history of the State possesses no distinctive features.

The present chief, Malhār Rao Ponwār, succeeded in 1892. The ruler of the State bears the titles of His Highness and Rājā, and receives a salute of 15 guns.

The population was: (1881) 68,222, (1891) 69,684, and (1901) 54,904, giving a density of 125 persons per square mile. It has decreased by 21 per cent. in the last decade. Hindus number 46,892, or 85 per cent.; and Musalmāns, 5,323, or 10 per cent. There are two towns and 237 villages in the State. The Mālwī dialect of Rājasthānī is the prevailing language. About 40 per cent. of the population are supported by agriculture and 28 per cent. by general labour.

The total area is 440 square miles, of which 73 square miles, or 17 per cent., have been alienated in land grants. About 194 square miles, or 44 per cent., are cultivated, of which 7 square miles are irrigated; 21 square miles, or 5 per cent., are under forest; 62 square miles, or 14 per cent., are cultivable but not cultivated; and the rest is waste. *Jowār* occupies 63 square miles, or 31 per cent. of the cultivated area; pulses, 76 square miles, or 38 per cent.; wheat, 16 square miles; gram, 11 square miles; cotton, 13 square miles; and poppy, 5 square miles.

The State is divided into six *parganas*, with head-quarters at Dewās, Bāgaud, Badgucha, Ringnod, Sārangpur, and Akbarpur. The total revenue is 3·5 lakhs, of which 2·6 lakhs is derived from land, Rs. 20,000 from customs, and Rs. 14,000 from opium and excise. The income of

land alienated in *jāgīrs* is Rs. 70,000. The chief heads of expenditure are: collection of revenue, Rs. 50,000; chief's establishment, Rs. 48,000; and general administration, Rs. 17,000. The incidence of the land revenue demand is Rs. 3-5-0 per acre of cultivated land, and Rs. 1-6-0 per acre of the total area.

The State forces consist of 80 cavalry, 99 infantry, and 27 artillerymen with four guns. A force of 96 regular police and 173 rural police are maintained for watch and ward. There is a Central jail at Dewās.

The first regular survey was made in 1881 and a regular assessment in 1894. A fresh settlement of the *pargana* of Bāgaud has been completed, but that of other *parganas* has been postponed on account of the late famine and a succession of bad years.

Dewās Town.—Capital of the twin States of the same name in Central India, situated in 22° 58′ N. and 76° 4′ E., 1,784 feet above sea-level, on the Bombay-Agra road, 24 miles from Indore. The population in 1901 was 15,403, of whom 8,713 resided in the portion belonging to the senior branch (see DEWĀS STATE), and 6,690 in that of the junior branch. The town lies at the foot of a conical hill, known as the Chāmunda Pahār, or 'hill of the goddess Chāmunda,' which rises about 300 feet above the general level. It derives its name either from this hill, which, owing to the shrine upon it, was known as Devīvāsinī ('the goddess's residence'), or, as it is also alleged, from the name of the founder of the village out of which the town grew. Dewās was not a place of importance until after 1739, when it came into the hands of the Marāthās. Until 1886 the two branches exercised joint jurisdiction. In that year definite limits were assigned to each branch, the main street forming the dividing line. There are no buildings of importance in the town. The Chāmunda hill is mounted by a broad flight of stone steps, leading to an image of the goddess cut in the rocky wall of a cave. Water is supplied from a double system of water-works, one belonging to each branch, and is distributed through the town by stand-pipes. Two palaces, two sets of public offices, and two jails are maintained, and the two sections are administered by separate municipalities. A school, hospital, and guesthouse are owned jointly by both branches. A combined British post and telegraph office stands in the town.

Dhābla Dhār.—*Thakurāt* in the BHOPĀL AGENCY, Central India.

Dhābla Ghosi.—*Thakurāt* in the BHOPĀL AGENCY, Central India.

Dhādi.—A petty State feudatory to the Jubbal State, Punjab, with an area of 25 square miles. Its capital is situated in 31° 8′ N. and 77° 48′ E. Formerly a dependency of Tharoch and then of Bashahr, Dhādi was annexed to Rāwain in the time of the Gurkha supremacy, but in 1896 was declared feudatory to Jubbal. The population in 1901 was 247, and the revenue is about Rs. 1,400. The present Thākur, Dharm Singh, is a Hindu Rājput, during whose minority the

administration is conducted by one of his relatives, who has full powers, except that sentences of death require confirmation by the Superintendent, Hill States, Simla.

Dhāka.—Division, District, subdivision, and city in Eastern Bengal and Assam. *See* DACCA.

Dhākādakshin.—Village in the North Sylhet subdivision of Sylhet District, Eastern Bengal and Assam, situated in 24° 48′ N. and 92° 1′ E. The father of the Vaishnavite reformer, Chaitanya, was settled here, and in the neighbourhood a shrine to the memory of Chaitanya is visited by pilgrims from all parts of the District and even from Bengal.

Dhaleswari.—River of Assam which rises in the Lushai Hills, where it is known by the name of Klangdong, and, after flowing north for 180 miles, falls into the Barāk at Siyāltek in Cāchār District. Changsil, one of the earliest British outposts in the Lushai Hills, is situated near its right bank ; and the river is still used as a trade route as far as Sairang, a few miles from Aijal, the head-quarters of the Lushai Hills. At Pollycharā the Dhaleswari enters Cāchār District, and from this point flows through the fertile Hailākāndi valley. During the rains small feeder steamers proceed up the river as far as Kukicharā twice a week, and in the dry season their place is taken by country boats. The river passes by numerous tea gardens and bazars, the most important mart being Siyāltek. The banks are steep and high, and the channel deep ; but the river is liable to sudden freshes, which occasionally do some damage to villages in the neighbourhood, and small embankments have been erected on two or three gardens to prevent the spill water from injuring the tea gardens. The Dhaleswari used formerly to run along the west side of the valley and fall into the Barāk near Badarpur ; but one of the Kāchāri Rājās is said to have diverted its course close to Rangpur, and this new channel is known as the Kātākhāl. The old channel is now completely cut off from the upper waters of the Dhaleswari by an embankment, but the bed still contains a good deal of water, and between June and September boats of 4 tons burden can proceed above Hailākāndī as far as Ainākhāl.

Dhalkisor.—River of Bengal. *See* RUPNĀRĀYAN.

Dhāmi.—One of the Simla Hill States, Punjab, lying between 31° 7′ and 31° 13′ N. and 77° 3′ and 77° 11′ E., 16 miles west of Simla, with an area of 26 square miles. Population (1901), 4,505. When India was invaded by Muhammad of Ghor in the twelfth century, the founder of this State fled from Rājpura in Ambāla District and conquered its territory. Formerly a feudatory of Bilāspur, it became independent on the expulsion of the Gurkhas in 1815. The present chief, Rāna Hīra Singh, succeeded in 1895. The State has a revenue of Rs. 15,000, out of which Rs. 720 is paid as tribute, half the tribute having been remitted for the life of the present Rānā.

Dhamnār.—Village in Indore State, Central India, situated in 24° 12′ N. and 75° 30′ E., of interest on account of the numerous old excavations, Buddhist and Brāhmanical, which exist in a low hill of coarse laterite of a very friable description. The Buddhist excavations are situated at three points on the scarp of the hill, but only those on the southern face are of any importance. These consist of a series of rock-cut caves, some being dwelling-rooms and others *vihāras* (monasteries) and *chaitya* halls (churches). There are fourteen caves of importance, of which the Barī Kacheri ('big courthouse') and Bhīm's Bāzār are the finest. The Barī Kacheri consists of a *chaitya* hall, 20 feet square, containing a *stūpa*. It has a pillared portico, enclosed by a stone railing cut to imitate a wooden structure. Bhim's Bāzār, the largest cave in the series, measuring 115 feet by 80, is curious as being a combined *vihāra* and *chaitya* hall. The roof has fallen in, but that of the chamber in which the *stūpa* is situated was ribbed in imitation of wooden rafters. The remaining caves are smaller. One contains a recumbent figure of the dying Buddha; and figures of Buddha occur in other caves. The age of these constructions is put between the fifth and seventh centuries, a century or two earlier than those at Kholvi.

The Brāhmanical excavation lies north of these caves. A pit 104 feet by 67 and 30 feet deep has been cut in the solid rock, so as to leave a central shrine surrounded by seven smaller ones. The shrines have the appearance of an ordinary temple, but are hewn out of the rock in which the pit was sunk, the spire of the central temple being on a level with the ground at the edge of the pit. A long passage cut through the rock leads into the pit from the east. The temple was originally dedicated to Vishnu and contained a four-armed statue of that deity, but a *lingam* has been added in front of the statue. From its general similarity to the temple at Barolli, Fergusson assigned it to the eighth or ninth century, a date which is supported by some inscriptions found on the spot by Cunningham.

A similar series of caves is situated at Polādongar near Garot, and others are found at Kholvi, Awar, and Benaiga in Jhālawār and at Hātigaon and Rāmagaon in Tonk, all within a radius of 20 miles.

[A. Cunningham, *Archaeological Survey of India*, vol. ii, p. 270.]

Dhāmpur Tahsīl.—South-eastern *tahsīl* of Bijnor District, United Provinces, comprising the *parganas* of Dhāmpur, Seohārā, Nihtaur, and Būrhpur, and lying between 29° 2′ and 29° 25′ N. and 78° 19′ and 78° 41′ E., with an area of 459 square miles. Population increased from 254,011 in 1891 to 265,185 in 1901. There are 674 villages and 6 towns: SHERKOT (population, 14,999), NIHTAUR (11,740), SEOHĀRĀ (10,062), DHĀMPUR (7,027), SAHASPUR (5,851), and TĀJPUR (5,015). The demand for land revenue in 1903–4 was Rs. 1,74,000, and for

cesses Rs. 82,000. The density of population, 578 persons per square mile, is the highest in the District. Several rivers cross the *tahsīl* from north to south, the chief being the Gāngan, the Khoh, and the Rāmgangā. Dhāmpur lies in the central depression of the District and is fertile; but parts of it are liable to flooding, and sandy tracts are found in the east. In 1903–4 the area under cultivation was 320 square miles, of which 39 were irrigated. Wells supply about half the irrigated area, and small canals from the Gāngan and Khoh about a third.

Dhāmpur Town.—Head-quarters of the *tahsīl* of the same name in Bijnor District, United Provinces, situated in 29° 18′ N. and 78° 31′ E., on the main line of the Oudh and Rohilkhand Railway. Population (1901), 7,027. The first historical event connected with the town is the defeat of the imperial forces here by Dunde Khān, the Rohilla, about 1750. Dhāmpur was sacked by the Pindāris under Amīr Khān in 1805, and an attempt was made to plunder the treasury during the Mutiny in 1857. The town is well built and thriving, and contains the *tahsīlī*, a private dispensary, and a branch of the American Methodist Mission. Dhāmpur has been a municipality since 1866. During the ten years ending 1901 the income and expenditure averaged Rs. 7,000. In 1903–4 the income was Rs. 10,000, chiefly from octroi (Rs. 6,000); and the expenditure was also Rs. 10,000. There is a considerable trade in iron and brassware; and locks, brass candlesticks, carriage ornaments, gongs, and badges are largely made. The *tahsīlī* school has 160 pupils, and the municipality manages two schools and aids seven others with 574 pupils.

Dhāmra.—River and estuary in Bengal, formed by the BRĀHMANĪ and BAITARANĪ and their tributaries, which meet in 20° 45′ N. and 86° 49′ E., and enter the Bay of Bengal in 20° 47′ N. and 86° 58′ E. The Dhāmra is navigable, but is rendered dangerous by a bar across its mouth. It forms the boundary line between the Districts of Cuttack and Balasore, but its waters lie within the jurisdiction of Balasore.

Dhamtarī Tahsīl.—*Tahsīl* of Raipur District, Central Provinces, lying between 20° 1′ and 21° 2′ N. and 81° 25′ and 82° 10′ E. In 1901 the area was 2,542 square miles, and the population 310,996 persons; but in 1906 the western portion of the Balod and Sanjāri tracts, the Jamaruā-Dallī group, and the Dondī-Lohāra *zamīndaris* were transferred to the Sanjāri *tahsīl* of the new Drug District, leaving an area of 1,598 square miles, with a population of 188,206, compared with 192,950 in 1891. The density is 118 persons per square mile. The *tahsīl* contains one town, DHAMTARĪ (population, 9,151), the headquarters; and 541 inhabited villages. The land revenue demand in 1902–3 on the area now constituting the *tahsīl* was 1·26 lakhs. The

tahsīl consists of a long narrow strip extending along the west of the Mahānadī river, open and fertile in the north but covered with hill and forest to the south. It contains 828 square miles of 'reserved' forest.

Dhamtarī Town.—Head-quarters of the *tahsīl* of the same name in Raipur District, Central Provinces, situated in 20° 42′ N. and 81° 35′ E., 46 miles south of Raipur town, with which it is connected by a narrow-gauge branch railway, and 2 miles from the Mahānadī river. Population (1901), 9,151. Since the opening of the railway in 1901 the importance of the town has greatly increased. It was created a municipality in 1881. The municipal receipts during the decade ending 1901 averaged Rs. 3,500. In 1903–4 the income was Rs. 3,600, chiefly derived from a house tax. Dhamtarī now receives the exports of produce from the south of Raipur District and from the Bastar and Kānker States. Lac, myrabolams, and hides are the principal exports. A branch of the American Mennonite Mission, which has been established in the town, supports a dispensary, a leper asylum, and an English middle school. The municipal institutions include a dispensary and a vernacular middle school, and there is a Government girls' school.

Dhanaula.—Town in the Phūl *nizāmat* of Nābha State, Punjab, situated in 30° 17′ N. and 75° 38′ E., 40 miles west of Nābha town. Population (1901), 7,443. Founded in 1718, the town was the capital of the State until Rājā Hamīr Singh made Nābha his residence in 1775. It has no trade, but possesses a police station, a primary school, and a dispensary.

Dhandhuka Tāluka.—Southern *tāluka* of Ahmadābād District, Bombay, including the petty subdivision of Gogha, lying between 21° 26′ and 22° 33′ N. and 71° 19′ and 72° 23′ E., with an area of 1,298 square miles. There are 3 towns, DHANDHUKA (population, 10,314), its head-quarters, DHOLERA (7,356), and RĀNPUR (6,423), in the *tāluka* proper, and one, GOGHA (4,798), in the outlying petty subdivision, with 204 villages in both. Population in 1901 was 128,559, compared with 157,963 in 1891, the decrease being due to famine. This is the most thinly populated *tāluka*, with a density of only 99 persons per square mile. Land revenue and cesses amounted in 1903–4 to nearly 3·1 lakhs. The surface of the *tāluka* is an open, treeless, black-soil plain, sloping gently towards the Gulf of Cambay. In the west is a tract of bare hills and rough valleys, with millet-fields and garden patches. Cotton is grown in the centre and wheat in the east. The water-supply is scanty. There are no large rivers, and the streams of the Bhādar and the Utāvli lose themselves in marshes. Wells are few and irrigation limited. The climate is trying, except in the cold season. Rainfall varies from 18 to 58 inches.

Dhandhuka Town.—Head-quarters of the *tāluka* of the same name in Ahmadābād District, Bombay, situated in 22° 23′ N. and 71° 59′ E., on the right bank of the Bhādar, 62 miles south-west of Ahmadābād city and 100 miles north-west of Surat. Population (1901), 10,314. The town lies in an open plain, exposed to the burning winds of the hot season. The water-supply is extremely bad. Bohrās and Modh Vānīs form a large class of the population. Coarse cloth, pottery, and carpenter's work are the chief industries. Together with Dholka, the town was ceded to the British in 1802. The municipality, established in 1860, had an average income of about Rs. 12,000 during the decade ending 1901. In 1903-4 its income was Rs. 16,000, including a grant of Rs. 5,000 for educational purposes. Dhandhuka is a place of some antiquity. In the twelfth century it rose to fame as the birthplace of the Jain teacher, Hemchandra, in whose honour Kumār Pāl of Anhilvāda raised a temple known as Vehar ('the cradle'). The survey for a railway extension from Dholka has been made. The town contains a Sub-Judge's court, a dispensary, and six schools, of which one is an English middle school for boys with 60 pupils and the remainder are vernacular schools, four for boys and one for girls, attended respectively by 465 and 120 pupils.

Dhansiri (1).—River of Assam which rises in the Nāgā Hills and for a considerable distance forms the boundary between that District and Nowgong. At Dimāpur it enters Sibsāgar District and flows north-north-east to Golāghāt, where it turns to the west and falls into the Brahmaputra after a total course of 180 miles. The upper portion of the Dhansiri valley is a plain of considerable width, shut in between the Nāgā and the Mīkīr Hills, and covered with dense tree forest; and, except in the neighbourhood of Golāghāt, the greater part of the course lies through jungle land. Boats of 4 tons burden can proceed as far as Golāghāt in the dry season and Dimāpur in the rains; but, owing to the sparseness of population on its banks, the river, in spite of its size, is not largely used for trade. A small steamer runs from Dhansirimukh to Golāghāt every week during the rains and collects tea from the gardens in the vicinity. Canoes are floated down the river and cotton is brought down by Nāgās in the cold season. The Assam-Bengal Railway crosses the Dhansiri at Bokājān, and there are five ferries at different parts of its course.

Dhansiri (2).—River of Assam which rises in Towang, a province subject to Lhāsa, and enters Darrang District a little to the north of Udalguri. From there it flows south-south-east and falls into the Brahmaputra. At the place where the river leaves the hills there is a deep pool called Bhairabkund, which is regarded with veneration by the people in the neighbourhood. In 1902 the river changed its course and entered the bed of the Rowta, and since that date its floods have

done some damage in the Orāng *mauza*. For the greater part of its course it flows through jungle, and the total area of cultivated land affected is comparatively small. The river is not used either for irrigation or as a trade route, and its spill water is supposed to deposit sand, not silt.

Dhaola Dhār.—Mountain chain in Kāngra District, Punjab, formed by a projecting fork of the Outer Himālayan range, marking the boundary between the Kāngra valley and Chamba. The main system here rises steeply from the low lands at its base, unbroken by any minor hills, to an elevation of 13,000 feet above the valley beneath. The chain is formed by a mass of granite, which has forced its way through the superincumbent sedimentary rocks, and crowns the summit with its intrusive pyramidal crests, too precipitous for the snow to find a lodging. Below, the waste of snowfields is succeeded by a belt of pines, giving way to oaks as the flanks are descended, and finally merging into a cultivated vale watered by perennial streams. The highest peak attains an elevation of 15,956 feet above sea-level, while the valley has a general height of about 2,000 feet. DHARMSĀLA, the head-quarters of Kāngra District, lies on a southern spur of the Dhaola Dhār. The name means the 'white' or rather 'grey range.'

Dhār State.—A treaty State in Central India, under the Bhopāwar Agency, lying between 21° 55′ and 25° 23′ N. and 74° 41′ and 76° 33′ E. It has an area of about 1,775 square miles, of which, however, 329 square miles are held by guaranteed estate-holders, 1,446 square miles being *khālsa* or directly under the Darbār. The territory is much cut up by intervening portions of other States. It takes its name from the old city of Dhār, long famous as the capital of the Paramāra Rājputs. The country falls into two natural divisions: the high-level tract with an area of 869 square miles, situated above the Vindhyan scarp, on the Mālwā plateau; and the districts which lie in the hilly country to the south of this range. The Narbadā, Mahī, Chambal, Kālī Sind, and numerous tributaries of these streams flow through the State.

A complete geological survey has not as yet been carried out. The greater part of the country lies in the Deccan trap area; but the Nimanpur *pargana*, which constitutes what is known to geologists as the Dhār forest area, presents many interesting and varied features. The northern part of this area is formed of trap, underlaid by rocks of the Lameta series. The extraordinary uniformity of the rocks met with, and the absence of all prominent physical features to mark their boundaries, point to its having been a very ancient land surface, which was reduced to an almost flat plain before the underlying Lametas had been deposited. The trap and other softer rocks were afterwards removed by denudation and exposed the old surface. In the south of this region the Vindhyans are particularly well shown. At Dhārdī

village (22° 19′ N. and 76° 25′ E.) the Narbadā leaps over a ledge of shale and has worked the underlying sandstone into pot-holes, in which, after the river has subsided, large numbers of pebbles are found beautifully polished by contact with each other at the sides of the excavation. The stones consist mostly of Bijāwar jaspers, agates, diorite, and sandstone pebbles, which are much sought after by pilgrims, who set up the larger stones as *lingams*. In the centre of the tract is a large outcrop of Bijāwar sandstone, mixed with a white conglomerate of quartz and a cherty limestone underlaid with gneiss. By far the most remarkable rocks in this area, however, are the columnar basalts found in intrusive dikes. These columns are horizontal, and at right angles to the walls of the dikes. At Sītāban village (22° 32′ N. and 75° 22′ E.) one of these dikes forms an almost rectilineal ridge 2½ miles long, rising to about 200 feet above the plain and striking east and west. Its summit is of very unusual appearance, being covered with huge six-sided prismatic columns stacked one upon the other with perfect regularity and quite loose. Many of the rocks in this area yield good building material, especially the Lameta sandstones, while the limestones are burnt for lime. Slates of good quality could be cut in the Bijāwars. Iron ores abound and were formerly smelted, as is shown by the remains of old workings and large deposits of slag.

The flora consists mainly of teak, black-wood (*Dalbergia latifolia*), *saj* (*Terminalia tomentosa*), *tendū* (*Diospyros tomentosa*), *sādad* (*Ougeinia dalbergioides*), and *anjan* (*Hardwickia binata*), with undergrowth of *Grewia*, *Phyllanthus*, *Zizyphus*, and *Woodfordia*. Tigers, leopards, *sāmbar* (*Cervus unicolor*), and other wild animals are met with in the jungles, while small game is plentiful.

The climate of the Mālwā plateau section is very temperate; in the Nimār section below the Vindhyas a much higher temperature is experienced during the summer months, while the cold season is of short duration. The following table gives the average mean temperatures (in degrees F.) of the three representative seasons:—

Division.	Cold season, October to January.		Hot season, February to May.		Rainy season, June to September.	
	Max.	Min.	Max.	Min.	Max.	Min.
Mālwā . . .	74·4	59	101·4	87·8	89·8	76·2
Nimār . . .	94·0	68	113·7	97·0	98·2	68·7

The annual rainfall for the two natural divisions during the last thirteen years averaged 26 inches for the Mālwā section and 25 inches for Nimār.

The chiefs of Dhār are Ponwār Marāthās, claiming descent from the

great Paramāra clan of Rājputs who ruled over MĀLWĀ from the ninth to the thirteenth century. The Paramāras were driven out by the Muhammadans, a section of the clan taking up their abode in the Deccan. From this section the present Marāthā Ponwārs trace their descent. In 1560 Dhār fell to Akbar and was included in the *Sūbah* of Mālwā. In 1690 the Marāthās crossed the Narbadā for the first time and plundered the town and district of Dharampurī belonging to this State; and from this time it was never free from their depredations. In 1723 the Nizām resigned the governorship of Mālwā, and was succeeded in 1724 by Girdhar Bahādur, whose vigorous opposition to the Marāthās delayed the establishment of their power in Central India. Udājī Ponwār, an officer in the *paigāh* or body-guard of the Sātāra Rājā, Sāhū, came to the front about this time, and in 1723 had established himself temporarily in Dhār, but was driven out on the arrival of Girdhar Bahādur. In 1729-30, however, he managed to defeat both Girdhar and his successor Dāya Bahādur, and thus finally cleared the way for the Marāthā ascendancy. In 1742 the Peshwā formally confirmed Anand Rao Ponwār in the fief of Dhār by *sanad.* Anand Rao I now became one of the leading chiefs of Central India, holding considerable dominions and sharing with Holkar and Sindhia the rule of Mālwā. Malcolm remarks it as a curious coincidence that the success of the Marāthās should, by making Dhār the capital of Anand Rao and his descendants, have restored the sovereignty of a race who seven centuries before had been expelled from the government of that city and country.

Anand Rao died in 1749 and was succeeded by his son Jaswant Rao, who was killed at Pānīpat in the battle with Ahmad Shāh Durrāni (1761). His minor son Khande Rao succeeded, the management of affairs being placed in the hands of a Deccanī Brāhman, Mādho Rao Orekar. From this time the power of the State commenced to decline. In 1774 the Peshwā Raghoba was obliged to send his wife, Anandī Bai, to the Dhār fort for safety. The territory was at once overrun by Raghoba's opponents, who desisted only on the surrender of Anandī Bai and her infant son Bājī Rao, afterwards the last of the Peshwās. In 1782 Khande Rao died and was succeeded by his son Anand Rao II. The latter was desirous of conducting personally the administration of his State. This did not, however, suit the schemes of the minister, Rang Rao Orekar, who made over the country to the mercies of Sindhia. Sindhia plundered it with his troops and seized large portions of its territories. The State was at this time shorn of all its outlying districts, and on the death of Anand Rao, which occurred at this juncture, would, but for the heroic defence of the Dhār fort by his widow, the courageous Maina Bai, have been deprived of the whole of its possessions.

The Pindāri raids and general lawlessness in Central India during this period at length reduced Dhār to the last extremity, so that in 1819, when a treaty was made with the British Government, the State consisted only of the capital and country immediately round it, with a revenue of Rs. 35,000. On the signing of the treaty, the districts of Berasiā (*see* BHOPĀL STATE) and Badnāwar were restored. Rām Chandra Rao, who had succeeded Anand Rao, died in 1833, and was followed by Jaswant Rao II, adopted from another branch of the house. He died of cholera early in 1857, and was succeeded by his adopted son Anand Rao III, a boy of thirteen. Anand Rao was too young to manage the State in these troublous times. The actual rulers were suspected of complicity in the rebellion, and the State was confiscated, but was ultimately restored in 1860, with the exception of the Berasiā *pargana*, which had been given to Bhopāl. In 1877 Anand Rao received the personal title of Mahārājā and the K.C.S.I., and in 1883 the further decoration of C.I.E. was conferred on him. He died in 1898, and was succeeded by his adopted son the present chief, Udājī Rao Ponwār, who was born in 1886, and during his minority the administration was conducted by a Superintendent under the direct supervision of the Political Agent. The chief has the titles of His Highness and Rājā, and receives a salute of 15 guns.

The State of Dhār is possessed of many architectural and archaeological treasures, among which the old fort of MĀNDU stands first. There are also at DHĀR TOWN many remains of both the Muhammadan and earlier Hindu periods, while several ancient records of the greatest interest have been discovered among them. At Dharampurī (22° 9′ N. and 75° 21′ E.), on the Narbadā, some temples of the mediaeval period possess considerable architectural merit.

The population at the last three enumerations was: (1881) 149,244, (1891) 169,474, and (1901) 142,115. It decreased by 16 per cent. during the last decade. The density of population is 80 persons per square mile. There are two towns in the State, DHĀR (population, 17,792), the capital, and KUKSHĪ (5,402); and 514 villages. Hindus number 93,787, or 66 per cent.; Animists, 32,630, or 23 per cent.; Musalmāns, 12,648, or 9 per cent.; and Jains, 2,987.

The principal tribes and castes are Bhīls, who number 18,507, or 13 per cent. of the total population; Bhilālas, 10,840; Rājputs, 12,381; Kunbīs, 9,744; and Brāhmans, 8,490. The prevailing speech consists of Bhīl dialects, spoken by 43,800 persons, or 30 per cent.; Hindī, by 39,300, or 28 per cent.; and Mālwī, by 33,532, or 24 per cent. About 56 per cent. of the population are supported by agriculture, 13 per cent. by general labour, and 20 per cent. by industrial occupations.

The Canadian Presbyterian Mission has a chapel, hospital, and school

in the chief town, and 58 Christians were returned in 1901, almost all of whom were Bhīls.

The soil on the high-level tract is of the high fertility common in Mālwā. In the lower tract most of the country is covered with jungle, and, except for the land lying immediately along the river-bed, is not of any great value from an agricultural point of view.

The 1,446 miles of the *khālsa* area are distributed thus: 594 square miles, or 41 per cent., are cultivated, of which 26 square miles are irrigable; 381 square miles are covered with forest; 204 square miles are cultivable but not cultivated; and 267 square miles are uncultivable waste.

Of the total cropped area, *jowār* occupies 197 square miles, or 35 per cent.; wheat 118 square miles, or 21 per cent.; maize 48 square miles, gram 32, other pulses 31, *til* 25, *bājra* 23, rice 3, linseed 9, cotton 47, and poppy 8 square miles. The land under cultivation has increased by 6 per cent. since 1890, and, but for the disastrous effect of the famine of 1899–1900, would certainly have increased to a still greater extent. The area occupied by forest is very considerable, and much of the timber is of great value. Since 1896 the forests have been under the management of a trained Forest officer, and yielded a net gain to the State of Rs. 5,000 in 1903. The prevalent trees are *shīsham* (*Dalbergia Sissoo*), *biya* (*Pterocarpus Marsupium*), *sādad* (*Terminalia tomentosa*), *anjan* (*Hardwickia binata*), and *haldu* (*Adina cordifolia*). Another tree met with in large numbers in Dhār and on the Māndu fort is the *Adansonia digitata*, the baobab of Livingstone, called by natives *Khurāsāni*, under the impression that it was introduced by one of the Khiljī kings from Khorāsān. It would actually appear to have been introduced here by Mahmūd Khiljī I of Mālwā.

The State formerly produced a considerable amount of iron from local ores, but the industry has died out. A certain amount of building stone is still quarried and exported.

Grain, cotton, and opium form the chief commercial products, being exported to Indore and Mhow. A Government dépôt for the weighing of opium has been established at Dhār. The average number of chests passing the scales during the last twenty years was 752, realizing 4·7 lakhs in the export duty levied by the British Government. In 1904–5, 578 chests passed the scales. A State duty of Rs. 20 per chest is also levied, bringing in an average revenue of Rs. 8,700.

The State contains 178 miles of metalled roads, the chief being those from Dhār town to Lebhad, joining the Mhow-Nīmach road; from Dhār to Dūdhī, joining the Agra-Bombay road; and a branch road to Nālcha and Māndu. A new road from Dhār to Nāgda, joining the Mhow-Nīmach road, is nearing completion. A regular State postal department existed up to 1901, employing a local issue of stamps; the State

system was then amalgamated with the British department, which now maintains twenty-five post offices, including combined post and telegraph offices at Dhar and Kukshī.

The State is divided for administrative purposes into six *parganas*, with head-quarters at Dhār town, Badnāwar, Sundarsī (in the Bhopāl Agency), Kukshī, Nimanpur, and Dharampurī. They include 256 *khālsa* villages directly under the Darbār, and 258 villages which have been alienated in various holdings.

When exercising powers, the chief, under the treaty of 1819, has control of all civil judicial and ordinary administrative matters. There are twenty-two feudatories, of whom thirteen hold under a guarantee from the British Government, but within their territory the Dhār Darbār exercises civil and criminal jurisdiction. These have certain judicial powers within the limits of their own holdings, but such powers are held subject to the superior control of the Darbār. Besides these feudatories, twenty-eight *jāgīrdārs* possess no civil or criminal powers. The State courts are constituted on the British model, and the Indian codes generally are followed as guides.

The total revenue of the State, excluding that of the alienated holdings (2 lakhs), amounts to about 9 lakhs, of which 5·5 lakhs is derived from land, Rs. 11,000 from opium, Rs. 80,000 from tributes, Rs. 30,000 from excise, Rs. 26,000 from forests, and Rs. 21,000 from stamps. The ordinary expenses amount to 7·9 lakhs, of which 1·5 lakhs is spent on the chief's establishment, 1·3 lakhs on collection of revenue, Rs. 49,000 on police, Rs. 53,000 on general administration, Rs. 22,000 on forests, Rs. 19,000 on medical, and Rs. 16,000 on education.

The average incidence of the land revenue demand is Rs. 2-7-4 per acre of cultivated land and 15 annas per acre of total area. The fertile soil of the plateau is assessed at Rs. 2-14-0 to Rs. 1-4-0 an acre, while in the hilly tract the rates vary from Rs. 1-8-0 to 8 annas. The present system of assessment is based on the nature of the soil, its proximity to villages, and capability of irrigation. Rates vary from Rs. 17 to Rs. 2-8-0 an acre for irrigated land, and from Rs. 2-3-0 to Rs. 1-9-0 for 'dry' land, exclusive of the perquisites of the *patwāris*, *pātels*, and village officials.

Dhār formerly paid Rs. 20,000 per annum as contribution to the Mālwā Bhīl Corps. Since 1881 an annual contribution of Rs. 6,600 has been paid, the remainder having been capitalized by the surrender of Government promissory notes, aggregating 3 lakhs.

The Dhār Darbār never had a silver coinage. Up to 1887 copper coins were minted, but in that year the British currency was substituted, a special coin with the addition of the words 'Dhār State' being struck at the Calcutta Mint. In 1895 the British rupee was made legal tender throughout the State.

A small force of regulars and irregulars is maintained. The former, who are employed for guard and escort, number 53 cavalry, 200 infantry, and 19 artillerymen with 5 guns. There are also 245 irregulars, who assist in police work. A force of 317 regular police is maintained, assisted by 895 rural police (*chaukīdārs*) for village watch and ward. A Central jail is kept up at Dhār.

In 1850 the first school was opened for boys, and in 1864 one for girls was added. In 1872 a regular educational department was founded, which in 1881 supervised 20 schools. In 1905, 44 were maintained by the Darbār with 1,670 pupils, including 127 girls, besides 30 private schools with 600 pupils. Among the last is a girls' school belonging to the Canadian Presbyterian Mission, opened in 1898. There are two printing presses, one private and the other a State press which prints reports, a certain number of books, and the Dhār *Gazette*, an official issue.

Medical institutions include 13 hospitals and dispensaries, the first having been opened in 1854. In 1902–3 the number of persons successfully vaccinated was 2,114, giving a proportion of 15 per 1,000 of the population. Vaccination is not compulsory, but is steadily growing in popularity.

A regular survey for revenue purposes was carried out in 1902–4, which dealt chiefly with *khālsa* villages.

Dhār Town.—Capital of the State of the same name in Central India, situated in 22° 36′ N. and 75° 19′ E., 33 miles by road from Mhow on the Rājputāna-Mālwā Railway, and 1,908 feet above sea-level. The name is usually derived from *Dhārā Nagari*, the 'city of sword-blades.' The site is picturesque, the town lying somewhat lower than the surrounding country, its numerous lakes and many shady trees forming a striking contrast to the barren yellow downs which enfold it on all sides. In the north, towering over the town, stands a fort built of a fine red sandstone. The older part of the town is surrounded by a brick wall of Muhammadan type, while a rampart-like mound lying just beyond the wall and called the Dhul Kot possibly represents the still more ancient fortification of Hindu times.

The town is an old one, and was for about five centuries the capital of the Paramāra chiefs of Mālwā. The first capital of the dynasty was UJJAIN; but Vairisinha II, the fifth prince of the line, at the end of the ninth century moved to Dhār, which became from this time actually, if not nominally, the capital of Mālwā, and is so intimately connected with the Paramāra clan. Ujjain appears, however, to have been still recognized as the capital, even in the beginning of the eleventh century. After the accession of Rājā Bhoj, however, Dhār assumed the first place. During the rule of Munja Vākpati (974–95), Sindhurājā (995–1010), and Bhoj (1010–53), Dhār was recognized throughout India as a seat of

learning, these monarchs, themselves literary composers and no mean scholars, being great patrons of literature, who drew all the talent of India to their courts. Dhār suffered the usual vicissitudes of cities in those days, its security depending on the power of its rulers to resist aggression. It was sacked by Jaya Sinha, the Chālukya king of Anhilvāda Pātan, in 1020; and by Someshvara, the Western Chālukya king, in 1040, when Bhoj was forced to flee.

During the Muhammadan period it became known as Pīrān Dhār, owing apparently to the numerous Muhammadan saints who have been connected with the place; and many of their tombs are still to be seen. The first appearance of Muhammadans in Dhār was in 1300, when Alā-ud-dīn subdued all Mālwā as far as Dhār. Ten years later, Malik Kāfūr, Alā-ud-dīn's great general, halted at Dhār, then evidently in Muhammadan hands, on his return from defeating Rāmdeo of Deogiri. During the famine which raged in 1344, Muhammad bin Tughlak halted at Dhār, and found that the whole country was desolate and that all the posts had left the roads. In 1399 Dilāwar Khān was made governor of the *shikk* of Dhār and soon became practically independent, his son and successor Hoshang Shāh being the first of the Muhammadan kings of Mālwā. Dhār at this time became second in importance to MĀNDU, which Hoshang Shāh made his capital.

Under Akbar, Dhār became the chief town of a *mahāl* in the Māndu *sarkār* of the *Sūbah* of Mālwā. In 1598 Akbar, while directing the invasion of the Deccan, stopped at Dhār seven days, a fact recorded on the iron pillar at the Lāt Masjid. In 1658 the fort was held by the troops of Dārā Shikoh, then engaged in his struggle with Aurangzeb; on the approach of Aurangzeb they evacuated it and joined the army of Jaswant Singh, which was defeated two months later at Fatehābād. It passed finally from the Mughals to the Marāthās in 1730.

The population in 1901 was 17,792, Hindus forming 75 per cent. and Musalmāns 19 per cent. Christians numbered 56, chiefly native converts of the Canadian Presbyterian Mission established in the town.

Dhār is the principal trade centre of the State, a considerable commerce in grain and opium passing through its markets to Mhow for export to Bombay and elsewhere. A Government opium dépôt for the payment of duty is situated here.

Many buildings of interest, both Muhammadan and Hindu, may be seen in the town, several of which have yielded ancient records of great historical importance. The fort, which stands on a small elevation to the north of the town, is said to have been built in the time of Muhammad bin Tughlak (1325-51). The first distinct reference to it is made by Barani, who states that certain large sums had accumulated at Deogiri out of the revenue collections made by Katlagh Khān when governor in the Deccan, and as they could not be conveyed as far as Delhi, they

were placed in Dhārāgir, a strong fort, then under the reprobate governor Azīz Himār. The fort is historically important as the birthplace of Bājī Rao II, the last of the Peshwas, who was born here in 1775, and whose toy well is still preserved. During the Mutiny of 1857 the fort was seized by Rohillas and other mercenaries in the employ of the State, and was the first place assaulted in Central India by the Mhow column. After a bombardment conducted by General Stewart which lasted six days, the fort was found to be empty, the enemy having escaped to Mandasor. The breach then made is still visible, though partially repaired. The following are the chief archaeological remains in the town.

The Lāt Masjid was erected by Dilāwar Khān out of the remains of Jain temples in 1405, and takes its name from an iron pillar (*lāt*) which is lying outside. An inscription upon the pillar states that Akbar rested here in the forty-fourth year of his reign (1598). The origin of this pillar is not certainly known, but it is supposed to have been put up in commemoration of a victory, probably in the time of Arjuna Varman Paramāra (1210–18). Jahāngīr in his diary mentions that Sultān Bahādur of Gujarāt wished to take the pillar away, but that it fell and broke in two. It was originally 43 feet high, but now lies in several pieces.

The Kamāl Maula is a small enclosure containing four tombs. One is said to be that of Mahmūd Khiljī I (1435–69), the other is that of Shaikh Kamāl Maulvi. Over the doorway is a handsome blue tile with an inscription in Kufic characters. Kamāl-ud-dīn was a follower of the famous saint Nizām-ud-dīn Auliya, who lived in the time of Alā-ud-dīn (1296–1316). This mausoleum was built in 1457 by Mahmūd I in honour of his memory.

Rājā Bhoj's school is another mosque made out of Hindu remains in the fourteenth or fifteenth century. Its present title is a misnomer, derived from the numerous slabs containing rules of Sanskrit grammar which have been used to pave the floor. It stands on the site of an old temple, probably that mentioned in a play of which a portion was discovered here inscribed on stone slabs fixed in the back of the *mihrāb*. The temple was dedicated to the goddess Sarasvatī, and is described as the ornament of the eighty-four squares of Dhārānagarī. On two pillars are a curious epitome of Sanskrit inflexional terminations, cut so as to resemble a snake, and called *Sarpabandhi* in consequence.

The mausoleum of Abdullah Shāh Changāl lies to the south-west of the town on the old Hindu rampart. This, the oldest mausoleum in Dhār, is the tomb of a Muhammadan saint who lived in the time of Rājā Bhoj II and is said to have converted him to Islām. South of the town stands a temple dedicated to Kālika, situated on a low hill overlooking a picturesque tank.

The Canadian Presbyterian Mission has a chapel, a hospital, and a

school at Dhār. A high school and several other schools, a public library, a hospital, a *dāk*-bungalow, the residence of the Political Agent, and combined post and telegraph offices are also situated in the town.

[*Archaeological Survey Report* (1902-3); *Archaeological Survey of Western India Progress Report* (1904-6); Captain Barnes, *Journal of the Bombay Branch, Royal Asiatic Society*, vol. xxi, pp. 332-54.]

Dharampur State.—Native State in the Surat Political Agency, Bombay, with an area of 704 square miles. It is bounded on the north by the Chikhli *tāluka* of Surat District and the State of Bānsda; on the east by the State of Surgāna and the Dāngs; on the south by Nāsik District; and on the west by the Bulsār and Pārdi *tālukas* of Surat District. The territory is 40 miles long from north to south, and 20 in breadth from east to west.

Only a small portion of the State is cultivable; the rest is hilly, rocky, and covered with forest and brushwood. Dharampur is well supplied with rivers—the Damāngangā, the Kolak, the Pār, the Auranga, and the Ambika flow through the State on their way to the Gulf of Cambay. Except in Dharampur town and a few other villages, where there are reservoirs, wells and river pools are the only source of the water-supply. The annual rainfall is estimated at over 75 inches. The climate is very unhealthy.

It is probable that the territory of Dharampur, or Rāmnagar, as it was originally called, was once much more extensive than now, stretching westward as far as the sea-coast. In 1576 the chief of Rāmnagar went to meet Akbar's minister Todar Mal at Broach, and accepted military rank at his hands. Seventy-two of the Dharampur villages were wrested from the State by the Marāthās early in the eighteenth century. The claims of the Peshwā on the revenues of the State were ceded to the British under the terms of the Treaty of Bassein (1802), and the State now pays tribute of Rs. 9,000 to the Government. The ruling family are Sesodia Rājputs; they follow the rule of primogeniture in point of succession, and hold a *sanad* authorizing adoption. The chief is entitled to a salute of nine guns.

The State contains one town, DHARAMPUR, and 272 villages. The population in 1901 was 100,430, including 98,290 Hindus, 1,858 Musalmāns, and 229 Pārsīs.

Towards the west poor black soil is found, which becomes even poorer in the east. In 1903-4 the area occupied for cultivation was 131 square miles. Forests cover 229 square miles. The principal forest products are *mahuā* flowers, teak, black-wood, and bamboos; the crops are rice, pulse, gram, and sugar-cane; the manufactures are mats, baskets, fans, molasses, catechu, and pottery. A cart-road, passing southwards through Peint, connects the State of Dharampur with Nāsik Road on the Great Indian Peninsula Railway, while another rougher track

running westwards, and passable for carts, joins it with Bulsar on the Bombay, Baroda, and Central India Railway.

The chief has power to try his own subjects for capital offences. Civil justice is administered by four courts. Persons convicted of murder are punished with imprisonment for life. The chief administers the State himself, and maintains no regular troops, but has 199 irregulars, besides a police force of 131, which includes 26 excise police. The land revenue and liquor contracts are farmed, and the farmers, as a rule, pay partly in cash and partly in grain and grass. There are many cesses, which are generally included in the gross sum leviable from the village householders. Land is not liable to be sold for private debts. A survey settlement has recently been completed. The present maximum rates per acre are 12 annas to Rs. 1-12 for 'dry' land, and Rs. 3 to Rs. 16 for rice land. The State had a gross revenue of over 6½ lakhs in 1903-4, including a loan of 2½ lakhs; the expenditure amounted to 6½ lakhs, including 3·8 lakhs as repayment of loans and interest. The chief items of receipts are land revenue (about 2 lakhs), excise (1 lakh), and forest (Rs. 48,000). The expenditure comprises public works, Rs. 45,000; *darbār* expenses, about Rs. 18,000; allowances to the chief's family, over Rs. 28,000; and police, Rs. 16,000. In 1903-4 there were 23 schools with 790 pupils. The State contains a dispensary which treated 11,000 patients in 1903-4, and a leper asylum with 37 inmates. In the same year 3,000 persons were vaccinated.

Dharampur Town.—Chief town of the State of the same name in the Surat Agency, Bombay, situated in 20° 34′ N. and 73° 14′ E. Population (1901), 6,344, including 5,316 Hindus and 977 Muhammadans. It is administered as a municipality at the cost of the State.

Dharangaon.—Town in the Erandol *tāluka* of East Khāndesh District, Bombay, situated in 21° 1′ N. and 75° 16′ E., on the Jalgaon-Amalner branch of the Great Indian Peninsula Railway. Population (1901), 14,172. Dharangaon was formerly the head-quarters of the Bhīl Corps. A considerable trade in cotton and oilseeds is carried on with Jalgaon, where many of the Dharangaon merchants have agents. The paper and cloth of Dharangaon were formerly held in esteem. At present the manufacture of paper has entirely ceased; but the weaving of coarse cloth still gives employment to more than 100 looms. In 1855 Government established a cotton-ginning factory at Dharangaon, with 93 saw-gins, under the management of a European overseer; merchants and cultivators were charged Rs. 10 a month for the use of a gin. But the experiment proved costly, and was subsequently abandoned. Under Marāthā rule, Dharangaon was the scene of a terrible massacre of Bhīls, who had on several occasions plundered

the town. A factory was established here by the English as early as 1674. The following year the town was plundered by Sivajī, and again in 1679. It was at that time one of the most flourishing marts in this part of the country. Six years later, in 1685, it was again plundered and burnt by Sambhājī. In 1818 Dharangaon came into the possession of the British; and it was here that Lieutenant (afterwards Sir James) Outram was engaged from 1825 to 1830 in training the Bhīls in an irregular corps. The town is badly supplied with drinking-water. It contains 3 cotton-gins and 2 presses, a dispensary, and 6 schools with 646 pupils, of which one, with 52 pupils, is a girls' school. The municipality, established in 1866, had an average income during the decade ending 1901 of Rs. 9,400. In 1903-4 the income was Rs. 13,800, more than half of which is derived from a tax on houses and land. An American mission, known as the Peniel Mission, works here, and maintains a school and an orphanage.

Dhārāpuram Tāluk.—Southern *tāluk* of Coimbatore District, Madras, lying between 10° 37′ and 11° 8′ N. and 77° 19′ and 77° 54′ E., with an area of 853 square miles. The population in 1901 was 271,127, compared with 252,847 in 1891. It contains one town, DHĀRĀPURAM (population, 17,178), the head-quarters; and 83 villages. The demand for land revenue and cesses in 1903-4 amounted to Rs. 4,47,000. The *tāluk* is an undulating plain, bounded on the north by the Noyil river and crossed by the Amarāvati, which irrigates a small area in the south. The rainfall is light, averaging only 20 inches annually, and the soil is mostly poor and sandy. The irrigated crops are consequently not particularly good, but the irrigation from the Amarāvati is excellent, and the area watered by wells is larger than in any *tāluk* except Palladam. As usual in the south of the District, *cambu* is by far the most common cereal, and much tobacco is raised with well-irrigation.

Dhārāpuram Town.—Head-quarters of the *tāluk* of the same name in Coimbatore District, Madras, situated in 10° 45′ N. and 77° 32′ E., on the banks of the Amarāvati, 30 miles south of Tiruppūr railway station. Population (1901), 17,178. It is traditionally reputed to have been of importance from very early times, and is historically not uninteresting. The Madura Jesuit mission founded a settlement here in the seventeenth century. In 1667 it was taken from the kings of Madura by Mysore; and in the campaigns with Haidar and Tipū it was a place of strategical value, having been captured by Colonel Wood in 1768, retaken by Haidar in the same year, again occupied by the British in 1783, given up by the Treaty of Mangalore, and taken again in 1790 by General Medows. In 1792 the fort was dismantled. The town then was almost deserted, but was rebuilt after 1799 upon plans drawn up by Mr. Hurdis, the first Collector of the southern part of the District, who made it his head-quarters. A District Court was

stationed here for a few years till 1816. The town, which is well built, stands on an open plateau 900 feet above the sea. Seven roads converge at it; it is known for the manufacture of strong and durable carts, and has a fair trade in country produce.

Dhārāseo.—*Tāluk* and town in Osmānābād District, Hyderābād State. *See* OSMANĀBĀD.

Dhāri (1).—Head-quarters of the *tāluka* of the same name, Amreli *prānt*, Baroda State, situated in 21° 20′ N. and 71° 5′ E. Population (1901), 4,262. The town contains an old fort which overlooks the junction of the rivers Natalia and Shatranjī, Munsif's and magistrate's courts, a dispensary, a military hospital, vernacular schools, and public offices. A detachment of the 3rd Baroda infantry regiment is stationed in a cantonment close to the Shatranjī. The municipality receives an annual grant from the State of Rs. 900.

Dhāri (2).—Petty State in REWĀ KĀNTHA, Bombay.

Dhārīwal.—Village in the District and *tahsīl* of Gurdāspur, Punjab, situated in 31° 57′ N. and 75° 22′ E. Population (1901), 1,698. The New Egerton Woollen Mills are situated here. They were founded in 1880, and in 1904 gave employment to 908 persons. The value of the out-turn in 1905 was 113 lakhs. The goods manufactured include cloths, flannels, serges, yarn, and various articles of clothing.

Dharlā.—River of Eastern Bengal and Assam. *See* TORSĀ.

Dharmapuri Tāluk.—*Tāluk* of Salem District, Madras, lying between 11° 54′ and 12° 27′ N. and 77° 41′ and 78° 18′ E., with an area of 941 square miles. The Cauvery river bounds it on the west and is joined by the Sanatkumāranadī, which flows through the north-western portion of the *tāluk*. Near the junction of these rivers are the falls of Hogenakal or the 'smoking rock.' The population in 1901 was 206,030, compared with 178,442 in 1891. There are 580 villages, and only one town, DHARMAPURI (population, 8,102), the head-quarters. The demand for land revenue and cesses in 1903–4 amounted to Rs. 2,54,000.

Dharmapuri Town.—Head-quarters of the *tāluk* of the same name in Salem District, Madras, situated in 12° 8′ N. and 78° 10′ E. It is connected by a road 18 miles long with the Morappūr station on the Madras Railway, and will shortly be linked to it by a narrow-gauge (2 feet 6 inches) railway. Population (1901), 8,102. The town was for some years the residence of Major (afterwards Sir Thomas) Munro. He planted a fruit garden here and constructed a square stone tank, and speaks affectionately of the place in his letters. The only trade of Dharmapuri is in skins. An old fort in the town played some part in the wars of this part of the country, but is now overgrown with prickly pear.

Dharmavaram Tāluk.—Central *tāluk* of Anantapur District,

Madras, lying between 14° 11′ and 14° 37′ N. and 77° 19′ and 77° 53′ E., with an area of 632 square miles. The population in 1901 was 70,943, compared with 65,629 in 1891. There are 48 villages and one town, DHARMAVARAM (population, 10,658), the head-quarters, and the junction of a branch of the Southern Mahratta Railway with the Villupuram-Dharmavaram branch of the South Indian Railway. The demand for land revenue and cesses in 1903–4 amounted to Rs. 1,29,000. The country is hilly on the eastern frontier and on the south and west. The soil is chiefly of poor red and gravelly varieties, and there is little black soil. The rainfall is under 21 inches. The principal crops are consequently horse-gram and millet. *Rāgi*, *cholam*, rice, and castor are also grown to a less extent. The irrigation works are few and unimportant. The only large tank is that at Dharmavaram town, which has been formed by damming up the Chitrāvati river.

Dharmavaram Town.—Head-quarters of the *tāluk* of the same name in Anantapur District, Madras, situated in 14° 25′ N. and 77° 43′ E., at the junction of the Villupuram-Dharmavaram branch of the South Indian Railway with the Guntakal-Bangalore branch of the Southern Mahratta Railway, 73½ miles from Bellary and 200 miles from Madras. Population (1901), 10,658. It is said to have been founded by one Kriyāsakti Udaiyār, and was formerly fortified. It is built on the edge of a beautiful tank of great size, formed by damming up the Chitrāvati river, which irrigates 1,416 acres. It contains a Vaishnava temple of great antiquity in which is a sacred spring of never-failing water. The manufacture of silk and cotton cloths for women is carried on, and there is a market of some importance. The place is known for its gingelly oil, much of which is made by a colony of Tamil oil-pressers.

Dharmjaygarh (formerly known as Rābkob).—Head-quarters of the Udaipur State, Central Provinces, situated in 22° 29′ N. and 83° 14′ E., on a picturesque bend of the Mānd river, near the centre of the State. About one mile to the south of the present site lie the ruins of the residency of the former Rājās of Udaipur; this spot was called Rābkob. There are now only a few walls and foundations visible, and a large excavation in the solid rock called a *baoli*; this is about 30 feet square and has a well in the centre, which is approached by a flight of steps. Dharmjaygarh contains a police station, a jail with accommodation for 50 prisoners, a hospital, and a dispensary.

Dharmkot.—Town in the Zīra *tahsīl* of Ferozepore District, Punjab, situated in 30° 57′ N. and 75° 14′ E., 41 miles east of Ferozepore town. Population (1901), 6,731. The town was originally known as Kotālpur, but was renamed after its occupation in 1760 by the Sikh chieftain, Tāra Singh, of the Dallewāla confederacy, who built a fort, now destroyed. The municipality was created in 1867. The income

and expenditure during the ten years ending 1902-3 averaged Rs. 3,600. In 1903-4 the income was Rs. 3,900, chiefly from octroi; and the expenditure was Rs. 3,500. Dharmkot being situated near the grand trunk road, with a good bazar, and being the only town in the immediate neighbourhood, a considerable trade is carried on in piece-goods, brought to the market via Ludhiāna, and in grain. The town possesses a vernacular middle school maintained by the municipality, and a Government dispensary.

Dharmsāla.—Hill station, the head-quarters of Kāngra District, Punjab, situated in 32° 13′ N. and 76° 11′ E. Population (1901), 6,971. Dharmsāla lies on a spur of the Dhaola Dhār, 16 miles north-east of Kāngra, in the midst of wild and picturesque scenery. It originally formed a subsidiary cantonment for the troops stationed at Kāngra, and was first occupied as a station in 1849, when a site was required for a cantonment to accommodate a Native regiment which was being raised in the District. A site was found on the slopes of the Dhaola Dhār, in a plot of waste land, upon which stood an old Hindu resthouse, or *dharmsāla*, whence the name adopted for the new cantonment. The civil authorities, following the example of the regimental officers, and attracted by the advantages of climate and scenery, built themselves houses in the neighbourhood of the cantonment; and in 1855 the new station was formally recognized as the head-quarters of the District. Before the earthquake of 1905, the upper part of the station, which rises to a height of about 7,112 feet, contained the European houses, the station church, and the officers' mess and lines of the 1st Gurkhas, together with the public gardens, post office, and two bazars, the Forsythganj and McLeodganj. The public offices, a bazar, and a few European houses made up the lower station, as low as 4,500 feet. The 1st battalion of the 1st Gurkhas used to be stationed here, but was moved to the upper station in 1894-5. The upper and lower stations are connected by numerous roads, one of which, at a gentle gradient and passable by carts, is 5 miles in length. The other roads are steep paths down the hill-side. In the upper station are three level roads cut in parallel lines along the side of the hill, the lowest of which, called the Mall, is about 2 miles in length, ending on one side at the public gardens and the Gurkha mess, and on the other at the McLeodganj bazar, so called in honour of the late Sir D. McLeod, formerly Lieutenant-Governor of the Province. It is connected with the upper roads by paths, most of which are steep ascents, up the face of the hill. The public gardens, which were, before the earthquake, laid out with much taste in lawns and terraces, contained a valuable collection of indigenous and imported trees and shrubs, and were overlooked by the Assembly Rooms, a handsome building comprising a public hall, a library and reading-

room, and a billiard-room. The church was beautifully situated in a recess of the mountain. The churchyard contains a monument erected to the memory of Lord Elgin, who died here in 1863. Immediately above the station rises a hill known as Dharmkot, the summit of which is a favourite resort. There are also some picturesque waterfalls, within a walk, at Bhāgsu Nāth. The station was destroyed by the earthquake of April 4, 1905, in which 1,625 persons perished at Dharmsāla alone, including 25 Europeans and 112 of the Gurkha garrison. It has been decided to retain Dharmsāla as the head-quarters of the District, and new offices will shortly be erected. In the upper station, many of the barracks and officers' houses have already been rebuilt. The garrison consists of two battalions of Gurkhas.

The scenery of Dharmsāla is peculiarly grand. The station occupies a spur of the Dhaola Dhār itself, and is well wooded with oak and other forest trees. Above it the pine-clad mountain-side towers towards the loftier peaks, which, covered with snow for half the year, stand out jagged and scarred against the sky. Below, in perfect contrast, lies the luxuriant Kāngra valley, green with rice-fields and a picture of rural quiet. Much has been done of late years to render Dharmsāla more accessible. Cart-roads connect it with the plains, via Hoshiārpur on the south and via Pathānkot on the west; there is a tonga service from Pathānkot, and a telegraph line connects Dharmsāla and Pālampur with Amritsar and Lahore. The rainfall is very heavy, and the atmosphere is peculiarly damp during the three months of the rainy season. The annual fall averages 126 inches, by far the highest figure reached at any point of observation in the Province. In January, February, and March storms also are very frequent. Trade is confined to the supply of necessaries for the European residents, officials, and their servants. The Dal fair, held at the Dal Lake, close to the cantonment, in September, is largely attended by the Gaddis and other Hindus. The famous temple of Bhāgsu Nāth is two miles to the east of the station. The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 9,700, and the expenditure Rs. 9,500. In 1903–4 the income and expenditure were Rs. 13,100 and Rs. 11,700 respectively. The chief sources of income are taxes on houses and lands and the sale of trees and grass. The income and expenditure of cantonment funds during the ten years ending 1902–3 averaged Rs. 2,900.

Dharnaoda.—*Thakurāt* in the GWALIOR RESIDENCY, Central India.

Dhārwār Agency, The.—This comprises the single Petty State of Savanūr situated within Dhārwār District, Bombay. *See* SAVANŪR STATE.

Dhārwār District.—District in the Southern Division of the Bombay Presidency, lying between 14° 17′ and 15° 53′ N. and 74° 43′

and 76° 2′ E., with an area of 4,602 square miles. It is bounded on the north by the Districts of Belgaum and Bijāpur; on the east by the Nizām's Dominions and the Tungabhadra river, which separates Dhārwār from the Madras District of Bellary; on the south by the State of Mysore; and on the west by the District of North Kanara. Its greatest length from north to south is 116 miles, and its greatest breadth 77 miles.

Physical aspects.

Dhārwār District is roughly divided into two belts, characterized by differences of configuration, soil, and products. The Belgaum and Harihar road may be considered the dividing line. To the north and north-east of that road, in the *tālukas* of Navalgund, Ron, and the greater part of Gadag, spread vast unbroken plains of black soil, which produce abundant crops of cotton. In the south-eastern portion of this plain are the Kappat hills; and again, after passing over a stretch of black soil in the Karajgi *tāluka*, there is an undulating country of red soil, which reaches to the frontier of Mysore. The western belt of the District is traversed by low hills, extending from the southern bank of the Malprabha river to near the Mysore frontier. This tract consists of a succession of low ranges covered with herbage and brushwood. The ranges are separated by flat valleys; and it is to these valleys and the lower slopes of the hills that cultivation is chiefly confined. Farther west, the country becomes still more hilly, and the trees increase in size towards the frontier of North Kanara. The *tālukas* of Hāgnal and Kod, to the south of Dhārwār town, present almost the same appearance—small hills rising out of the plain in all directions with fertile valleys between. The number of tanks in these *tālukas* is a special feature in the landscape; but, with some marked exceptions, they are small and shallow, retaining water for not more than three or four months after the rains.

From its position on the summit of the watershed of the Peninsula, Dhārwār is devoid of large rivers. Of its seven principal streams, six run eastwards towards the Bay of Bengal, and one penetrates the Western Ghāts to the Arabian Sea. The Malprabha, for about 20 miles, forms the northern boundary of the District, dividing it from Bijāpur. The Bennihalla has its source about 20 miles south of the town of Hubli, and flowing northwards through the central plain of the District falls into the Malprabha. Its water is brackish, and soon dries up. The TUNGABHADRA, on the south-eastern frontier, divides Dhārwār from Mysore and Bellary in Madras. The Varadā, a tributary of the Tungabhadra, passes from the south-west to east through two of the southern *tālukas*. The Dharma crosses Dhārwār in the south, and eventually joins the Varadā. The Kumadvati flows north-east through the Kod *tāluka*, falling into the Tungabhadra near

Holianveri. The only stream flowing west is the Bedti Nullah or Gangāvali, which passes through the Kalghatgi *tāluka*. None of these rivers is navigable, and the only one used for irrigation is the Dharma in the Hāngal *tāluka*.

Nothing very definite is known of the geology of Dhārwār, though it contains some rocks of considerable scientific and economic importance. Sandstone belonging to the Kalādgi (Cuddapah) group occupies all the north-east corner of the District. It also forms the summits of Navalgund and Nargund hills, on all of which it appears in large tabular masses. Laterite occurs in different parts, but chiefly in the west. Throughout the remainder of the District the rocks exposed are almost exclusively Archaean, belonging to an extremely varied set of gneisses and crystalline schists. Some of the latter, which have the appearance of being partly altered sediments, have been separated under the name of the Dhārwār series. They consist of hornblendic and chloritic schists, phyllites, and conglomerates, associated with banded jasper and hematitic quartzites. The foliation of the schists is parallel to that of the surrounding gneiss. The Dhārwār series is of extreme economic importance, as all the auriferous quartz veins known in India traverse rocks belonging to this system. Two great bands traverse the District with a north-north-west and south-south-east strike, the western band passing through Dhārwār and from there to Harihar, the eastern passing Dambal. A great portion of the course followed by these outcrops is conjectural, and rests only upon a small number of observations at distant intervals. This applies specially to the western band between Dhārwār and Harihar, as this area has never been geologically examined. Numerous basic dikes traverse the gneiss area. They belong to two different formations: some of them are intrusions of the Deccan trap volcanic period; the others belong to a much older period of volcanic activity, contemporaneous with a part of the Cuddapah formation corresponding in age with the Bijāwar group.

Teak prevails throughout the whole of the Dhārwār, Kalghatgi, and Bankāpur forests; but towards Hāngal it almost disappears. Many kinds of bamboos also occur. In the scrub jungle of the dry stony hills the chief trees and bushes are *bandurbi* (*Dodonaea viscosa*), *khair*, *phulāte babūl* (*Acacia Latronum*), and *babūl* (*Acacia arabica*). Other important trees and plants are *hirda* (*Terminalia Chebula*), *umbar* (*Ficus glomerata*), *apta* (*Bauhinia racemosa*), *nana* (*Lagerstroemia macrocarpa*), *sisu* (*Dalbergia latifolia*), *chandan* (*Santalum album*), *chinch* (*Tamarindus indica*), and *bhirand* (*Garcinia purpurea*). The chief fruit trees are the fig, plantain, citron, cashew-nut, *jāmbul*, *phanas* (*Artocarpus integrifolia*), mango, lime, guava, sweet-sop, custard-apple, and coco-nut. Many exotic plants, flowers, and vegetables are grown near Dhārwār town.

Almost every kind of game found in Southern India occurs in Dhārwār. The tiger is found in the Dhārwār, Kalghatgi, Hāngal, and Bankāpur forests. The leopard and the leopard-cat haunt the western forests, and leopards are common in the Kod and Gadag hill ranges. The black bear and bison are found occasionally. *Chītal* or spotted deer, the four-horned or ribbed-face deer, the mouse deer or *pisai*, wild hog, wolf, and jackal, are of common occurrence. The otter lives in most large rivers and streams. The porcupine and the hare are very common in the hilly and forest parts. Of game-birds, duck, teal, snipe, and quail are numerous, bustard and florican are less common, and sand-grouse abound in the red-soil *tālukas*. The rivers, streams, and lakes are fairly stocked with fish.

The climate is about the healthiest in the Bombay Presidency. In December and January dews are heavy and general. From February to the middle of April is the hot season, and from the latter date to the beginning of June, when the regular rainy season sets in, showers are frequent. Except in November and December, when strong winds blow from the east, the prevailing winds are from the west, south-west, and south-east. The temperature in January does not exceed 80°; in May it occasionally reaches 98°, falling to 91° in the rainy season.

The rainy season lasts from June to December. Its long duration is due to the occurrence of rain during the prevalence of both the south-west and north-east monsoon winds. The former cease in October and are followed by cool north-east breezes which gradually bring rain, heavy in the east, and extending even as far west as Dhārwār town in occasional showers during November and December. In the Kod and Rānībennur *tālukas* the rainfall of the two seasons is about equal. On the whole, Dhārwār District shares both monsoons in a greater degree than any other District of the Presidency. The maximum fall is in July (6 inches) and the minimum (less than half an inch) in February. The average for the whole year is 33 inches.

History.

The traditional history of Dhārwār goes back to the Pāndavas who are locally believed to have lived in Hāngal. Copperplate inscriptions seem to show that in the first century before Christ parts of Dhārwār were under the rulers of BANAVĀSI in North Kanara. The Andhrabhrityas of Banavāsi were succeeded by the Gangā or the Pallava kings, who in turn gave place to the early Kadambas, a Jain family that held sway in Banavāsi until the sixth century. The subsequent early history of the District may be divided into three periods: the Early Chālukya and Western Chālukya until 760, the Rāshtrakūta until 973, and the Western Chālukya again (973–1165), Kalachuri (1165–84), Hoysala (1192–1203), and Deogiri Yādava (1210–95), during which it was governed by feudatory Kadambas, whose head-quarters were at Banavāsi and Hāngal. In 1310 Malik

Kāfūr laid waste the Carnatic, and the southern Districts were again invaded by Muhammad bin Tughlak. The District next became part of the newly established kingdom of Vijayanagar, and subsequently was an object of the ambition of the Bahmani dynasty of the Deccan, who at times captured and held the fort of Bankāpur. Shortly before the battle of Tālikotā the District seems to have been conquered by the Bijāpur Sultāns, who ruled it until Aurangzeb overthrew the Adil Shāhi dynasty in 1686. To the Marāthās Dhārwār became an object of plundering raids, Hubli being sacked by Annāji Dattu in 1673, and the country devastated by Bājī Rao in 1726. The Marāthās, who had thus on several occasions asserted their claims to succeed to the remnants of Mughal authority in Dhārwār, were in 1764 dispossessed by Haidar Alī, but again became masters on the defeat of the latter by Mādhav Rao Peshwā in the succeeding year. And though Haidar, followed by Tipū, repossessed himself of the District for a time, the Marāthās held it from 1790, when they captured Dhārwār, until their defeat by the British in 1817. In 1836 the District was reduced by the separation of what is now Belgaum. Since then the only noticeable incident has been the rising of the Nargund chief in 1857-8, which resulted in the death of the Political officer, Mr. Manson, and the forfeiture of the Nargund estate.

Dhārwār is full of fine examples of the Chālukyan style, nearly every village possessing at least one old sculptured temple. Inscription slabs and memorial stones of the Chālukyan dynasty abound. The chief centres of such work are Gadag, Lakkundi, Dambal, Hāveri, and Hāngal. There are many old forts scattered through the District, and a few religious buildings, elaborately sculptured, and of beautiful though somewhat heavy design. Other places with buildings bearing inscriptions of interest, in addition to those already mentioned, are Annigeri, Bankāpur, Chaudadāmpur, Lakshmeshwar, and Naregal. Almost all of these places, though now greatly reduced in importance, contain ruins of beautiful stone temples dating from the ninth to the thirteenth centuries, built without mortar in what is locally known as the Jakhanāchārya style. Jakhanāchārya is said to have been a prince who, having accidentally killed a Brāhman, employed twenty years in building temples from Benares to Cape Comorin to atone for the sin of Brāhman-killing. In style and date the Jakhanāchārya temples correspond to the Hemādpanti temples in Khāndesh, the north Deccan, Berār, and the Central Provinces.

Population.

In 1872 the population of the District was 999,190, while the Census of 1881 returned 893,495 persons, the decline being due to the famine of 1876. The population of the District in 1891 and 1901 was 1,051,212 and 1,113,298 respectively. The following table gives statistics of population in 1901 :—

Tāluka.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Navalgund	565	3	83	94,709	168	− 11	7,049
Ron	432	2	84	103,298	239	+ 12	6,880
Dhārwār	430	2	129	126,797	295	− 0.2	9,874
Hubli	311	1	74	124,258	399	+ 5	11,251
Gadag	699	2	98	137,573	197	+ 10	9,695
Kalghatgi	275	...	99	53,657	195	− 3	1,850
Bankāpur	344	1	144	90,361	263	+ 6	6,106
Karajgi	441	1	127	104,342	237	+ 16	6,803
Hāngal	300	1	156	77,784	259	+ 4	3,477
Kod	400	...	176	96,245	241	+ 14	4,202
Rānībennur	405	3	116	104,274	257	+ 12	7,436
District total	4,602	16	1,286	1,113,298	242	+ 6	74,623

The chief towns are HUBLI, DHĀRWĀR, GADAG, RĀNĪBENNUR, NARGUND, NAVALGUND, and BANKĀPUR. Village sites in the Navalgund *tāluka* are far apart and much scattered, and the density there only reaches 168 persons per square mile. Of the total population, 86 per cent. are Hindus, 12 per cent. Musalmāns, and one per cent. Jains. Christians number 4,742, including 686 Europeans and Eurasians. Kanarese is the vernacular language of the people, though the Dhārwār dialect is not so pure as that spoken in Kanara itself. By many of the better classes Marāthī is understood; and Hindustāni is known to a few.

The population of the District consists largely of Lingāyats, who are found in all parts, with a total strength of 437,000. It is generally supposed that the Lingāyats date from the twelfth century, when a religious reformer, Basava, of Kalyāni in Hyderābād State, first brought into prominence this sect of Siva worshippers, whose peculiar mark is the wearing of the *lingam* or phallic emblem. In origin the movement was anti-Brāhmanical, and caste distinctions were entirely ignored by the earlier converts. These are now represented by the Panchamsālis, who form a group of intermarrying sub-castes, consisting of Ayyas or Jangams (53,000), Banjigs (45,000), and other Panchamsālis (164,000). Ayyas are usually priests, and Banjigs are traders. Below these divisions are a number of functional groups that do not intermarry and seem to represent converts who joined the sect when caste prejudice had re-established itself. The principal Lingāyat divisions of this description are Sadars (53,000), Ganigs (26,000), Nonabars (10,000), Kurvinshettis (8,800), and Kudavakkals (8,500). Of these, the Ganigs are oil-pressers and sellers, the Kurvinshettis are weavers, and the other groups are cultivators. At the bottom of the social ladder

are a few functional divisions, such as the Agasas or washermen, Chalvadis, Dhors, and other unclean castes, who are not admitted to full rites. It is supposed that the Lingāyats were largely converts from Jainism, which was prevalent throughout the Southern Marāthā Country when the sect first came into prominence. They are an orderly and peaceful community, over-fond of litigation, but leading sober and industrious lives. Brāhmans number 35,000, being mainly Deshasths (29,000). Dhangars and Kurubas (herdsmen) are numerous (105,000). Marāthās (53,000) and Pānchāls (21,000) are the other important Hindu castes. Among low castes are Māngs (38,000) and Mahārs (15,700). The Berads (68,400) are a wandering tribe of criminal habits, for which they have been noted in history since they plundered the ruins of Vijayanagar. Vaddars, or stone- and earth-workers, number 17,600. The majority of the population are supported by agriculture, which is the means of subsistence of 62 per cent. General labour supports 4 per cent. Under industries the cotton-weavers alone are of importance, weavers and their dependents numbering 36,000.

Of the 4,056 native Christians in 1901, 2,671 are Roman Catholics, and 1,000 belong to the Anglican communion. There are three Christian missions in the District. The chief one is subordinate to the Basel German Mission, with resident missionaries at Dhārwār, Hubli, and Betigeri-Gadag, and congregations at the villages of Unkal, Malasamudra, and Shagoti. The second mission is subordinate to the Roman Catholic Bishop of Poona, and has resident missionaries at Dhārwār, Hubli, Gadag, Alnāvar, and Tumrikop. The third mission is that of the Church of England, which is under the supervision of the Bishop of Bombay and is largely financed by the Society for the Propagation of the Gospel. The mission has congregations at Dhārwār, Hubli, and Betigeri-Gadag, with resident missionaries at the two latter places; in 1904 the number of native Christian adherents was 300 to 400.

Agriculture.

The soil of the District may be divided into three classes: namely, red soil, black soil, and a rich brown loam. The red soil is a shallow gravelly deposit formed by the disintegration of hills and rocks; the black soil is the well-known *regar*, or cotton soil, on which the value of Dhārwār as a cotton-producing area depends; and the brown loam is found chiefly in the west of the District, once the site of large forests: it is supposed to be chiefly of vegetable origin, and is of little depth. A field of black soil requires only one ploughing in the year, and is seldom manured. A field of red soil, on the other hand, is ploughed three or four times, and is generally manured.

The District is chiefly *ryotwāri*. About 400 square miles are *inam*

or *jāgīr* land. The chief statistics of cultivation in 1903-4 are shown below, in square miles:—

Tāluka.	Total area.	Cultivated.	Irrigated.	Cultivable waste.	Forest.
Navalgund .	565	541	...	24	...
Ron . .	432	350	1	13	2
Dhārwār .	430	300	7	28	45
Hubli . .	311	282	3	20	6
Gadag .	699	585	2	38	60
Kalghatgi .	275	170	5	22	75
Bankāpur .	344	272	13	26	35
Karajgi .	442	352	4	44	26
Hāngal .	299	214	62	36	31
Kod . .	400	301	39	48	38
Rānībennur .	405	296	2	43	53
Total	4,602*	3,663	138	342	371

* Statistics are not available for 119 square miles of this area.

The staple food-grain of the District is *jowār* (902 square miles), which is the most widely grown crop everywhere except in Kalghatgi, Hāngal, and Kod, where irrigated rice occupies the first place. Rice is the most prominent crop of the western *tālukas*, occupying 239 square miles, nearly half of which is irrigated. Wheat is grown in the northern *tālukas*, covering 414 square miles. Pulses covered 346 square miles, the chief kinds being *tur*, gram, *mūg*, and *kulith*. Oilseeds occupied 150 square miles, being commonest in the Navalgund, Gadag, and Ron *tālukas*. Cotton, indigenous and exotic, is the most important crop of the great black-soil plain in the north and east, and was grown in 884 square miles. Sugar-cane and chillies are extensively cultivated. In the south-west are rich gardens of areca-nut and coco-nut palms.

Dhārwār District stands first in the Presidency for its cotton, which is highly esteemed. As early as 1819 proposals were made for sowing Brazilian and North American cotton seed; but no definite step was taken until 1829, when an experimental farm was started by Government. The plants, however, suffered greatly from blight; and except for the opening of a small trade with China in 1830, the results were so discouraging that in 1836 the experiments were brought to a close. In 1840, at the instance of several commercial bodies in England, three American planters were sent to Bombay, who by 1843 had opened an experimental farm for American cotton five miles north-east of Hubli. In spite of unsatisfactory results at the outset, the farm prospered, and by 1845 2,749 acres were under exotic, chiefly New Orleans, cotton. In that year another farm was opened near Gadag, which met with remarkable success, and in 1846-7 local dealers began buying American cotton on their own account at rates considerably higher

than those for local cotton. In 1857–8 American cotton covered 130,880 acres, and experiments were also made with Egyptian cotton, which, however, gave poor results. About 1860 the practice of adulterating Dhārwār exotic cotton with indigenous cotton became so widespread that the Bombay Cotton Frauds Act, IX of 1863, was passed, while at the same time the American Civil War and the resulting cotton famine in Lancashire led to an enormous increase of the area under cultivation. Attention was again directed to the question of improving the Indian cotton supply, and fresh experiments were carried out in Dhārwār under trained European supervision between 1868 and 1878.

Advances under the Land Improvements and Agriculturists' Loans Acts amounted, during the decade ending 1903–4, to 16·8 lakhs, out of which 3·2 lakhs was lent in 1896–7, 2·5 lakhs in 1899–1900, and 2·4 lakhs in 1900–1.

With the exception of a superior class of buffaloes bred in Navalgund, the District is not famous for cattle- or buffalo-breeding. The bullocks in use are of three kinds: two inferior kinds of indigenous breed, and large well-made animals imported from Mysore for which very high prices are sometimes paid. Sheep and goats are reared by professional shepherds for local use, and are rarely exported. The ponies of Dhārwār were formerly held in great repute, but during the Persian and Abyssinian campaigns the District was almost denuded of the breed, and at present a smaller, often ill-formed, and more vicious class of pony has taken its place. Donkeys are used by washermen and Vaddars for pack-purposes.

Of the total cultivated area, 138 square miles, or 4 per cent., were irrigated in 1903–4. The various sources are: Government canals 9 square miles, tanks 117 square miles, wells 4½ square miles, and other sources 7½ square miles. Most of the ponds and reservoirs in the District are old works believed to date from the Vijayanagar period (1336–1565). Of these the chief are at Hāveri in Karajgi, at Nāgnur in Bankāpur, and at Dambal in Gadag. The Hāveri lake is one of the largest and most important reservoirs in the District. The Nāgnur lake has an earthen dam 3,400 feet long, but is so shallow that on an average the water lasts for only six months after the rains cease. The Dambal lake is said to be about three hundred years old, and most of the masonry consists of stones taken from Jain or Chālukyan temples. It commands a gross area of 40 square miles. The only important system of canal-irrigation is on the south bank of the Dharma river. The head-works are at Sringeri in Mysore. A solid masonry weir thrown across the stream raises the water a few feet and two canals are led off, one on each bank. The left-bank canal, called the Kamanhalli canal, is about 3 miles long; the right-bank canal, known as the main Dharma canal, is 17 miles long. The

chief Government irrigation works are: the Madag lake, situated in Mysore limits, irrigating 922 acres of land; the Dambal, irrigating 338 acres; Medleri, irrigating 52 acres; and Asundi, irrigating 289 acres. The capital outlay on these works up to 1903-4 was about 4 lakhs. The supply obtainable from wells is insufficient. In most parts the water-bearing strata lie far below the surface, occasionally as deep as 80 or 90 feet, while the water obtained is brackish. Parts of Navalgund and Ron are very scantily supplied with water. The District contains (1903-4) 4,835 wells and 2,752 tanks used for irrigation. There are 47 works for which only revenue accounts are kept, irrigating 85 square miles.

A large portion of Dhārwār is almost treeless. The forest area (371 square miles, including 156 square miles in charge of the Revenue department) belongs to two divisions: the 'moist' forests in the western *tālukas* of Dhārwār, Kalghatgi, Bankāpur, and Hāngal; and the 'dry' forests in the eastern and southern *tālukas* of Gadag, Karajgi, Rānībennur, and Kod. Hubli and Navalgund are bare of trees. Strict conservation with replanting is now being carried on in the Government Reserves. A great part of these are also valuable as grazing-ground for cattle. Considerable quantities of sandal-wood are found, especially in the 'moist' forests. Teak is also found in the 'moist' forests, except in Hāngal. The other principal trees have been mentioned above under Botany. The forest revenue in 1903-4 was about Rs. 60,500.

In former times gold is said to have been obtained in abundance, and even now the Kappat range in the neighbourhood of Dambal in the east of the District, and the beds of streams issuing from it, yield some gold. Steps are being taken to work the auriferous quartz veins in the Gadag hills by modern methods. In the hills in the west of the District iron was formerly smelted in considerable quantities. Owing, however, to the great destruction of timber, fuel has become scarce, and this industry is now carried on only to a limited extent. The iron made is of superior quality, but cannot as a general rule compete in cheapness with imported iron. Manganese is found in considerable quantities.

Trade and communications.

The manufactures consist of cotton and silk cloth, and the usual household utensils and ornaments. Common silk and cotton cloth are woven to a considerable extent in all the large towns. Fabrics of delicate texture and tasteful design are occasionally produced. Fine cotton carpets are manufactured at Navalgund, both for home consumption and for export to the neighbouring Districts. The wild aloe grows well, and the manufacture of matting from its fibre has been carried on at the jail with success. In the town of Dhārwār there is also a con-

siderable manufacture of glass bangles from blocks of rough blue and green glass imported from Bellary. At Hubli and Gadag there are cotton-ginning and pressing factories employing about 780 operatives. There are also three cotton-spinning mills, two at Hubli and one at Gadag, with a total capital of 16 lakhs. The annual out-turn is nearly 4,000,000 pounds of yarn, from 48,000 spindles, and about 1,600 operatives are employed daily.

The chief centres of trade are Hubli and Dhārwār town in the west, Navalgund in the north, Gadag in the east, and Rānībennur in the south. Cotton is the chief article of export, and European goods, chillies, coco-nuts, molasses, and betel-nuts are imported from Kanara and Mysore. The local trade in *jowār* is also considerable. The majority of the traders are local capitalists, a few representing firms in Bombay and other important places. Except some Pārsīs in the town of Dhārwār, they are by caste generally Brāhmans or Lingāyats, a few being Muhammadans, Gūjars, &c.

The main line of the Southern Mahratta Railway traverses the District, entering near Alnāvar and running due east through Hubli and Gadag. From Hubli one branch runs south-eastward, entering Mysore territory near Harihar; and from Gadag a second branch runs north towards Bijāpur. In no part of the Bombay Presidency has more been done of late years to improve communications than in Dhārwār. Fifty years ago there were neither roads nor carts. In 1903-4 the total length of metalled roads was 337 miles and of unmetalled roads 995 miles. All these, except 113 miles of metalled and 442 miles of unmetalled roads in charge of the local authorities, are maintained by the Public Works department. The District is connected with the ports of Kumpta, Kārwār, and Vengurla by excellent roads, the distance from the western sea being about 100 miles.

Famine.

From the earliest date of which historical record is available, Dhārwar District appears to have suffered from droughts of more or less severity. Between 1787 and 1796 a succession of droughts, accompanied by swarms of locusts, occurred. This period of famine is said to have been at its height about 1791-2. The people were forced to feed on leaves and berries, and women and children were sold or deserted. The next famine was in 1802-3, occasioned by the immigration of people from the valley of the Godāvari and the march of the Peshwā's army through the country. In 1832, from want of rain, prices ruled very high, but the distress cannot be said to have amounted to famine. Owing to successive bad seasons, famines occurred in the years 1866 and 1877, and it was found necessary to employ large numbers of people on works of public utility. In 1877 the District suffered very severely. At the height of famine in June, 1877, there were 57,000 persons on

relief works and 16,000 in receipt of gratuitous relief. The total cost of the famine in this District exceeded 13 lakhs. In 1891 the rainfall was capricious, and relief measures became necessary in parts of Gadag, Ron, and Navalgund. In 1896 the *kharīf* rains were very light and the District suffered partially (857 square miles or one-fifth of the total area). The last scarcity was in 1900, when the area affected was 357 square miles or one-twelfth of the total area. Relief works were opened in December, 1899, and were continued till December, 1901, but the number relieved reached only 2,000 at the worst period of distress. In October, 1878, swarms of rats appeared, chiefly in the black-soil tracts, and devoured a part of the cold-season crop. They reappeared in 1879, when at a cost of over Rs. 95,000 large numbers were killed and the harvest saved.

Administration.

The District is divided into 11 *tālukas*, with 2 *pethas* or petty subdivisions. These are DHĀRWĀR, HUBLI, GADAG (including Mundargi *petha*), NAVALGUND (including Nargund *petha*), BANKAPUR, RON, RĀNĪBENNUR, KOD, HĀNGAL, KARAJGI, and KALGHATGI. The administration is entrusted to a Collector and four Assistants, of whom three are members of the Indian Civil Service. The Collector is *ex-officio* Political Agent of the Savanūr State.

The District and Sessions Judge at Dhārwār is assisted by an Assistant Judge and four Subordinate Judges, who dispose of the civil work of the District. The Subordinate Judge of Dhārwār exercises a special jurisdiction over the whole District in suits of more than Rs. 5,000 in value. The other Subordinate Judges try suits of less than Rs. 5,000 in value. The District Court is chiefly a court of appeal. All the Subordinate Judges exercise the powers of a Court of Small Causes. There are altogether 35 officers in the District to administer criminal justice.

The foundation of the system of assessment in force under the Bijāpur (1489–1686), the Savanūr (1686–1752), and the Marāthā governments (1752–1817) was laid during the reign of the Vijayanagar king Krishna Rāya (1509–29). He originated the unit of land assessment and measurement known as the *rāya-rekha* or 'royal line,' which the Bijāpur Sultāns took as the *rakam* or 'basis' of their settlement. In the Vijayanagar settlement 'dry' lands alone were measured, the area of a 'wet crop' being estimated by the *khandis* or measures of seed required to sow it. The Bijāpur government increased the share claimed from the ryot by cesses, which were introduced from time to time nominally to last for a short period, but in practice became permanent. The Savanūr Nawāb, Halīm Khān, increased the assessment rates and reduced the country to great distress. From the acquisition of Dhārwār in 1818 till 1843 the original assessment remained without revision. Before the survey settlement was begun in

1843 less than half of the arable Government area was held for tillage. Owing to the introduction of lower rates under the survey settlement the collections in the settlement year showed a fall of about 30 per cent. When the settlement was completed in 1850, the occupied area was about two-thirds of the total arable area. Two years later the revenue for the first time exceeded the revenue collected in the year immediately preceding the introduction of the settlement. Since that date the progress of the District has been practically unbroken, and revenue collections rose from 10·5 lakhs in 1843–4 to 14·3 lakhs in 1873–4. The revision survey, carried out between 1874 and 1902, showed an increase in cultivable area of 41,000 acres, and raised the revenue on Government occupied land from 13 to 19 lakhs. The average rate of assessment per acre of 'dry' land is Rs. 1–1, of rice land Rs. 2–15, and of garden land Rs. 6–12.

Collections on account of land revenue and revenue from all sources have been, in thousands of rupees :—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	29,21	30,30	29,39	29,06
Total revenue . .	35,44	41,25	41,36	46,42

There are ten municipalities: DHĀRWĀR TOWN, HUBLI, GADAG, NAVALGUND, YAMNŪR, NARGUND, RĀNĪBENNUR, GUDDGUDDĀPUR, BYĀDGI, and HĀVERI. Outside these, local affairs are managed by the District board and eleven *tāluka* boards. The receipts of these boards in 1903–4 were 2·8 lakhs, chiefly derived from land cess. The expenditure amounted to 3·2 lakhs, of which about 1·3 lakhs was laid out on the maintenance and construction of roads and buildings.

The District Superintendent of police is aided by an Assistant Superintendent and two inspectors. There are 16 police stations in the District. The total number of police is 825, of whom 14 are chief constables, 187 head constables, and 624 constables. The mounted police consist of 10 *sowārs* under one *daffādār*. A Railway Police Superintendent in charge of the Southern Mahratta Railway line resides at Dhārwār town. There is one District jail at Dhārwār town, with accommodation for 336 prisoners. Besides this, 14 subsidiary jails can accommodate 79 males and 52 females. The daily average number of prisoners in all jails in 1904 was 400, 16 of whom were females.

Dhārwār District stands sixth as regards literacy among the 24 Districts of the Presidency, 6·7 per cent. of the population (12·8 males and 0·5 females) being able to read and write in 1901. In 1881 there were 364 schools in the District with an attendance of 21,262 pupils. The number of pupils rose to 34,025 in 1901. In 1903–4 there were 564

educational institutions with 23,577 pupils, of whom 3,666 were girls. The 542 institutions classed as public include 527 primary, 10 secondary, and 3 high schools, besides 2 training institutions, one for males and one for females, at Dhārwār town. Of these institutions, 4 are maintained by Government, 410 are managed by the District or municipal boards, 125 are aided, and 3 unaided. The total expenditure on education was more than 2·3 lakhs, of which Rs. 43,000 was derived from fees, and Rs. 57,000 was contributed by Local funds. Of the total, 72 per cent. was devoted to primary schools.

The District contains one hospital, eight dispensaries, and three railway medical institutions, with accommodation for 116 in-patients. The total number of patients treated in 1904 was nearly 94,000, including 1,079 in-patients, and 1,772 operations were performed. The total expenditure on the hospital and dispensaries, excluding the railway institutions, was Rs. 29,800, of which Rs. 17,900 were met from Local and municipal funds. Dhārwār town contains a lunatic asylum with a daily average of 78 inmates.

The number of persons successfully vaccinated in 1903–4 was 24,052, representing a proportion of 21·6 per 1,000 of population, which is much below the average for the Presidency.

[Sir J. M. Campbell, *Gazetteer of the Bombay Presidency*, vol. xxii (1884); J. F. Fleet, *The Dynasties of the Kanarese Districts* (1896); Papers issued by the Bombay Government regarding the Revision of Settlement, Nos. CXLV, CLV, CLVI, CLIX, CLX, CLXI, and CLXII.]

Dhārwār Tāluka.—North-western *tāluka* of Dhārwār District, Bombay, situated between 15° 19′ and 15° 41′ N. and 74° 43′ and 75° 13′ E., with an area of 430 square miles. It contains two towns, DHĀRWĀR (population, 31,279), the head-quarters, and HEBLI (5,294); and 129 villages. The population in 1901 was 126,797, compared with 127,094 in 1891. The density, 295 persons per square mile, exceeds the average for the District. The demand for land revenue in 1903–4 was 2·84 lakhs, and for cesses Rs. 22,000. The *tāluka* is hilly, the cultivation lying in patches in the valleys, except in the north and east where the rugged country yields place to a black-soil plain, broken by an occasional peak or group of hillocks. Although the annual rainfall averages 34 inches, water is scanty and usually brackish.

Dhārwār Town.—Head-quarters of Dhārwār District and *tāluka*, Bombay, situated in 15° 27′ N. and 75° 1′ E., on the Southern Mahratta Railway. Population (1901), 31,279, including suburbs. Hindus number 22,770, Muhammadans 7,427, and Christians 628. The fort stands on undulating ground. Towards the west low hills run down to the plains, forming the last spurs of the Western Ghāts.

The fort and the town are almost hidden from view on the east by trees and rising ground. The approach from the south is striking. The highest point is occupied by the Collector's office, from which a commanding view of the town, suburbs, and surrounding country is obtained. Below the office and adjacent to it is the temple of Ulvi-Basappa, and beyond, the hill of Mailarling, formerly considered the key to the fort of Dhārwār. Outside the town extensive plains of black soil stretch across to the hills of Navalgund and Nargund on the east, and on the north-east to the famous hill of Yellamma (*see* SAUNDATTI-YELLAMMA) and Parasgad. Towards the south-east the hill of Mulgund appears at a distance of about 36 miles.

There is no authentic evidence of the date when the fort was founded. A *purāna* or legendary chronicle concerning the origin of the neighbouring temple of Someshwar makes no mention of Dhārwār. According to local tradition, the fort was founded in 1403 by one Dhār Rao, an officer in the forest department under the Hindu king of Vijayanagar. The first certain notice of Dhārwār is in 1573, when the Bijāpur Sultān, Alī Adil Shāh, marched against it. At that date it was held by an officer of the king of Vijayanagar, who had assumed practical independence. The fort fell after a siege of six months, and the surrounding country was annexed to Bijāpur. In 1685 the fort was captured by Aurangzeb, and in 1753 it fell into the hands of the Marāthās. In 1778 Dhārwār was taken from the Marāthās by Haidar Alī, the Muhammadan usurper of Mysore, and in 1791 it was retaken by a British force auxiliary to the Marāthās under Parasu Rāma Bhau. On the final overthrow of the Peshwā in 1818, Dhārwār, with the other possessions of that potentate, fell to the British. The fort is described as being well planned and naturally strong. Previous to 1857 it was kept in repair; since then it has been breached, and, like all other forts in the District, is now fast falling into ruins. In 1837 Dhārwār was the scene of violent feuds between the Brāhmans and Lingāyats, compelling the interference of Government.

The town, which is very straggling, is made up of seven quarters or *mahāls*. There are a few good houses with upper storeys. A market is held every Tuesday. The only monument of historical interest is that erected in memory of the Collector, Mr. St. John Thackeray, and the Sub-Collector, Mr. J. C. Munro, who were killed at the taking of Kittūr in 1824. About a mile and a half south of Dhārwār is a hill called the Mailarling; on its summit stands a small square stone temple, built after the Jain fashion, and facing the east. The columns and beams are of massive stone, and the roof of the same material is handsomely carved. On one of the columns is an inscription in Persian, recording that the temple was converted into a mosque in 1680 by the deputy of the Sultān of Bijāpur. The only prosperous classes of the

population are the Brāhmans and Lingāyats. The Lingāyats are, as a rule, traders, who almost monopolize the export of cotton, timber, and grain. Some of the Musalmāns are also wealthy merchants. A few Pārsīs and Mārwāris, who have recently settled in the town, deal chiefly in European goods. The principal articles of export are cotton and rice; the imports comprise English piece-goods, chillies, coco-nuts, molasses, dates, betel-nuts, groceries, indigo, lead, zinc, and wrought and unwrought copper and brass. There are no manufacturing industries of any importance; but in the jail, carpets, table-linen, cloths, and cane articles, all of superior quality, are made by the prisoners. The municipality was established in 1856. During the decade ending 1901 the income averaged Rs. 46,000. In 1903-4 the income was Rs. 56,000, derived chiefly from octroi (Rs. 17,000), tax on houses and lands (Rs. 13,000), and market-fees. The water-supply is drawn from two reservoirs. There are also several wells in the town, but with one or two exceptions they are not used for drinking purposes, the water being brackish. The native quarter was formerly unhealthy; but since the introduction of the Municipal Act, some attention has been paid to drainage and sanitary requirements. Dhārwār contains 22 schools, including 3 high schools, one supported by Government, one belonging to the Basel Mission, and one unaided. A training college for masters and a school for mistresses have 136 and 14 pupils respectively. The Government high school has a music-class attached to it, and the male training college contains a workshop. There is also a school for European and Eurasian girls and another for boys. The total number of girls' schools is 8, with an attendance of 611 pupils. Besides the chief revenue and judicial offices, the town contains the head office of the Southern Mahratta Railway Company, a Subordinate Judge's court, a civil hospital, a railway dispensary, and a lunatic asylum with 78 inmates.

Dhasān (*Dashārnā*; possibly the *Dasaron* of Ptolemy).—A river of Northern India. It rises in Bhopāl State (23° 32′ N., 78° 30′ E.) among the Vindhyas, and after crossing Saugor District in the Central Provinces for about 60 miles, first touches the United Provinces in the extreme south of the Lalitpur *tahsīl* of Jhānsi District, which it divides from Saugor for about 30 miles. It then crosses several of the Bundelkhand States, and finally forms the boundary between Jhānsi and Hamīrpur for nearly 70 miles, till its junction with the BETWĀ at Chandwārī on the border of Jālaun District. The bed of the Dhasān is rocky in Saugor and Lalitpur, and at intervals after it first enters Jhānsi and Hamīrpur, but is then generally sandy, with nullahs and ravines running into it. Except during the rains it is easily fordable. A scheme has been sanctioned for the provision of irrigation in the west of Hamīrpur by damming this river and forming a reservoir.

Dhauli.—Hill in the Khurdā subdivision of Purī District, Bengal,

situated in 20° 15′ N. and 85° 50′ E., about 7 miles south of Bhubaneswar. On the northern side of the hill is a version of the famous rock edicts of Asoka. As in the version of Jaugada in the neighbouring District of Ganjām, the twelfth and thirteenth edicts have been left out, and in their place two separate edicts have been inserted. Above the inscription the forepart of an elephant has been carved out of the rock. The hill contains a number of plain caves, and has a temple of Mahādeo on its summit.

Dhaurahrā.—Town in the Nighāsan *tahsīl* of Kherī District, United Provinces, situated in 28° N. and 81° 5′ E., near the Sukhnī, a tributary of the Dahāwar. Population (1901), 5,669. The name of the place is locally derived from a small temple or *deorhā* which stands a little distance away, and according to tradition marks the site of the capital of a Pāsī principality, which was overthrown by the Bisens. During the Mutiny of 1857, fugitives from Shāhjahānpur and Muhamdī sought the protection of the Dhaurahrā Rājā; but he, on pressure from the rebel leaders, gave some of them up to their enemies. For this he was afterwards tried and hanged, and his estates were confiscated. Dhaurahrā is administered under Act XX of 1856, with an income of about Rs. 700. A market is held twice a week, and the town contains a dispensary and two schools with 62 pupils.

Dhebar Lake.—A large piece of water in the State of Udaipur, Rājputāna, lying between 24° 13′ and 24° 18′ N. and 73° 56′ and 74° 3′ E., about 30 miles south-east of Udaipur city. Its length from north-west to south-east is about 9 miles, and its breadth varies from 1 to 5 miles. It receives the drainage of about 690 square miles and has an area of 21 square miles. On the west the hills rise from 800 to 1,000 feet above the level of the water, while the small wooded islands and the picturesque fishing hamlets on the northern shore add greatly to the beauty of what is one of the largest artificial sheets of water in the world. The lake is formed by a magnificent dam at the south-west corner across a perennial stream, the Gomatī, built by Rānā Jai Singh between 1685 and 1691; and it is now generally called after him Jai Samand (*Jaya Samudra*, 'the sea of victory'). The dam is 1,252 feet long and 116 feet in height; its breadth at the base is 70 feet and at the top 16 feet. The centre is occupied by a quadrangular Hindu temple which shows fine carving. At the northern end is a palace with a courtyard, and at the southern end a pavilion (*darikhāna*) having twelve pillars. Between these buildings are six smaller domed pavilions or *chhatris*, and near the water's edge, on pedestals, is a range of stone elephants with their trunks upturned. On the hills to the south are two palaces, from the smaller of which a fine view of the lake is obtainable. Behind the dam, at a distance of about 100 yards, is a second wall 929 feet long and 100 feet in height, with a breadth of 35 feet at the

base and 12 at the top. The space between these two walls is being gradually filled in with earth. Canals carry the water to certain villages on the west, and the area irrigated in an ordinary year is estimated at about 19 square miles.

[J. Fergusson, *Picturesque Illustrations of Ancient Architecture* (1848); *Indian Antiquary*, vol. i.]

Dhenkānāl State.—One of the Tributary States of Orissa, Bengal, lying between 20° 31′ and 21° 11′ N. and 85° 10′ and 86° 2′ E., with an area of 1,463 square miles. It is bounded on the north by the States of Pāl Laharā and Keonjhar; on the east by Cuttack District and the State of Athgarh; on the south by Athgarh, Tigiriā, and Hindol; and on the west by Angul District and the States of Tālcher and Pāl Laharā. The Brāhmanī river, after forming the boundary between Dhenkānāl and Tālcher for a considerable distance, runs from west to east through the State along a richly cultivated valley and affords a waterway for trade. The State is said to derive its name from an aborigine named Dhenkā, who was in possession of a small strip of land, the site of the present palace; according to the story, he was killed in a nullah or hill stream by a scion of the Khurdā family, who founded the Dhenkānāl Rāj in the middle of the seventeenth century. The State was soon extended by conquests from the neighbouring chiefs, the largest acquisitions being made during the time of Trilochan Mahendra Bahādur (1756–98). The present chief's grandfather, Bhagīrath Mahendra Bahādur, was an enlightened ruler and was made a Mahārājā in 1869. Dhenkānāl is now third in importance among the Tributary States of Orissa. It is divided for administrative purposes into the head-quarters and the Baisingha subdivisions, the Brāhmanī river forming the dividing line. It yields a revenue of 2·19 lakhs and pays a tribute of Rs. 5,099 to the British Government. The population increased from 238,285 in 1891 to 273,662 in 1901; of these, 265,750 were Hindus and 7,132 Animists. The most numerous castes are Chāsas (51,000), Pāns (46,000), Sahars (21,000), Gaurs (18,000), and Khandaits (16,000). The population is contained in two towns, DHENKĀNĀL (population, 5,609), the head-quarters, and BHUBAN (6,788); and 968 villages. The density is 187 persons per square mile. Iron is plentiful, but is worked only on a small scale. Trade in timber, rice, oilseeds, and cereals is carried on by boats, pack-bullocks, and bullock-carts. Weekly markets are held in several places. Dhenkānāl is well provided with roads, one of them being the Cuttack-Angul-Sambalpur road, which is metalled and bridged for a considerable distance. The State maintains a well-organized charitable dispensary, in charge of an assistant surgeon, and a Lady Dufferin hospital at the capital, besides a dispensary in the Baisingha subdivision. It also keeps up a high school, in addition to 13 upper primary and 218 lower primary schools.

Dhenkānāl Town (or Nijgarh).—Capital of the Orissa Tributary State of the same name, Bengal, situated in 20° 40′ N. and 85° 36′ E. Population (1901), 5,609. The town contains the residence of the Rājā and other public buildings.

Dheri Shāhān.—Village in Rāwalpindi District, Punjab. *See* SHĀHDHERI.

Dhilwān Tahsīl.—*Tahsīl* of the Kapūrthala State, Punjab, lying between 31° 22′ and 31° 35′ N. and 75° 17′ and 75° 27′ E., with an area of 110 square miles. The population increased from 47,044 in 1891 to 48,985 in 1901. It contains 103 villages. The land revenue and cesses amounted in 1903-4 to 1·8 lakhs. The *tahsīl* is fertile and abounds in wells. It lies in the Beās lowlands, and the greater part of it is within the reach of the river inundations.

Dhodān.—*Tahsīl* in the Karmgarh *nizāmat*, Patiāla State, Punjab. *See* BHAWĀNIGARH.

Dhodap.—Fort in the Chāndor *tāluka* of Nāsik District, Bombay, situated in 20° 23′ N. and 74° 2′ E., on the highest hill in the Chāndor range, 4,741 feet above sea-level. The fort contains numerous caves hewn in the rock and the ruins of many buildings, the former quarters of the garrison. At the summit is a Musālman shrine known as Belpīr. The earliest mention of the fort is in 1635, when it surrendered to the Mughal general Alī Vardi Khān. Later it passed to the Peshwā, who made it the chief of the Nāsik forts. In 1768 Raghunāth Rao was defeated at Dhodap by his nephew Mādhu Rao. While in the possession of the Peshwā, it was attacked by two officers in Holkar's service and plundered. In 1818 it was surrendered to the British without a struggle.

Dhola.—Petty State in KĀTHIĀWĀR, Bombay.

Dholarva.—Petty State in KĀTHIĀWĀR, Bombay.

Dholera (or Roha Talao).—Seaport in the Dhandhuka *tāluka* of Ahmadābād District, Bombay, situated in 22° 15′ N. and 72° 11′ E., in the peninsula of Kāthiāwār, 62 miles south-west of Ahmadābād city. It is one of the chief cotton marts in the Gulf of Cambay. Population (1901), 7,356. Dholera was the first part of the District to come into British possession. It was surrendered by the proprietors in 1802 to save themselves from the encroachments of the Bhaunagar chiefs, and was then a village of 300 houses, with no trade. Though called a port, the town of Dholera lies about 12 miles from the sea. The Bhādar or Dholera creek, on which it stands, is said to have been, a century ago, open for boats up to Dholera; but for the last seventy years the creek has silted up and trade passes through two ports—Khun, about 5 miles lower down on the same creek, and Bavliari, on an inlet of the sea, about 16 miles south. There is a lighthouse visible for 12 miles at the entrance to the creek. Dholera has given the trade name to a quality

of cotton well-known in the European market. During the American Civil War (1862–5) it was the chief cotton port in Gujarāt. Before Dholera became a municipal town (1889), its conservancy and sanitary charges were met from the 'Dharam Talao' fund, created about the year 1818, for supplying water on the road to Dholera. The average income of the municipality during the decade ending 1901 was nearly Rs. 9,000, the income in 1903–4 being Rs. 9,600. The town contains a dispensary and five schools, of which one is an English middle school for boys with 28 pupils and the rest are vernacular schools, three for boys and one for girls, attended respectively by 350 male and 152 female pupils. The sea-borne trade in 1903–4 was valued at 19 lakhs: imports 6 lakhs, and exports 13 lakhs.

Dholka Tāluka.—Central *tāluka* of Ahmadābād District, Bombay, lying between 22° 24′ and 22° 52′ N. and 72° 1′ and 72° 23′ E., with an area of 690 square miles. It contains one town, DHOLKA (population, 14,971), its head-quarters; and 116 villages. The population in 1901 was 89,780, compared with 118,032 in 1891, the decrease being due to famine. The density, 130 persons per square mile, is much below the District average. Land revenue and cesses in 1903–4 amounted to 3·2 lakhs. The *tāluka* is a plain sloping south-west to the Little Rann. In the east, along the Sābarmatī, the fields are hedged and the land is thickly planted with fruit trees. The south-west is a bleak country exposed to the biting winds of the cold season. The only river is the Sābarmatī. The annual rainfall averages 34 inches.

Dholka Town.—Head-quarters of the *tāluka* of the same name in Ahmadābād District, Bombay, and present terminus of the Ahmadābād-Dholka Railway, situated in 22° 44′ N. and 72° 27′ E., 22 miles south-west of Ahmadābād city. Population (1901), 14,971. The extension of the railway to Dhandhuka is under consideration, and a survey has been made. Dholka is situated amidst ruined palaces, mosques, mausoleums, and spacious tanks embanked and lined with masonry. Though not regularly fortified, it is surrounded by a wall of mud 4 miles in circumference, and is probably one of the oldest towns in Gujarāt. It is supposed, in the early Hindu period, to have been visited by the Pāndavas, to have sheltered prince Kanaksen of the Solar race, and Minal Devī, the mother of Siddha Rājā of Anhilvāda (1094–1143), and to have been held by Vir Dhaval, the founder of the Vāghela dynasty (thirteenth century). During the Muhammadan period Dholka was the residence of a governor from Delhi, and it still contains the remains of many fine Musalmān buildings. It was taken by the Marāthās in 1736, came into the Gaikwār's hands in 1757, and was eventually ceded to the British in 1804. The greater part of the inhabitants are *Kasbātis* (townsmen), the descendants of the soldiers of fortune who came with the Vāghelas when driven from Anhilvāda by

Khiljī Alā-ud-dīn in 1298. The municipality, established in 1856, had an average income of Rs. 15,000 during the decade ending 1901. In 1903-4 the income was Rs. 17,000, derived chiefly from octroi (Rs. 11,000). The town contains a Sub-Judge's court, a dispensary, a mission orphanage, and seven schools, of which one is an English middle school with 62 boys, one an English class with 4 boys attached to the mission orphanage, and five vernacular schools—four for boys with 899 pupils and one for girls with 151.

Dholpur State.—The easternmost State of Rājputāna. Its area calculated from the standard topographical sheets is 1,155 square miles, but the revenue records of the State make it 1,197 square miles. It lies between 26° 22′ and 26° 57′ N. and 77° 14′ and 78° 17′ E., and is bounded on the north by the District of Agra; on the north-west by Bharatpur; on the west by Karauli; and on the south and east by Gwalior. The country is open and level in the north, but elsewhere consists for the most part of low hills or ravines. A range of sandstone hills runs from near the capital in a south-westerly direction, attaining in one place an altitude of 1,171 feet above the sea; these hills, as well as those farther to the west, are mostly bare of vegetation and rocky. The tract along the Chambal is termed the *Dāng*, and is deeply intersected by ravines, some of which are 100 feet deep, and extend from 2 to 4 miles into the interior.

Physical aspects.

The river CHAMBAL flows from south-west to north-east along the entire southern and eastern borders of the State, but receives no tributary from Dholpur. The BĀNGANGĀ (or Utangan) river enters the State in the north-west corner and flows east for about 40 miles along, or close to, the northern border; its bed is about 40 feet below the surrounding country, but in the rains it is liable to floods, rising from 15 to 20 feet. The Pārbati rises in Karauli, close to the western border, and after a sinuous north-easterly course of about 60 miles, falls into the Bāngangā; it has two small tributaries, the Mendka and Mendki, both of which rise near the sandstone ridge above mentioned, and flow north for 18 or 20 miles. The Pārbati and its tributaries dry up in the hot season, leaving occasional deep pools, and their banks are more or less fringed with ravines.

Portions of the State in the south and east are covered by the alluvium of the Chambal, which has excavated a broad valley through an extensive plateau formed of nearly horizontal Upper Vindhyan sandstones.

Tigers, leopards, and bears are found in the south-west, also *sāmbar* (*Cervus unicolor*) and hyenas. There are, in addition, antelope, *nīlgai* (*Boselaphus tragocamelus*), wild hog, and occasionally wolves in other parts, as well as the usual small game during the cold season.

The climate is generally healthy. Hot winds blow in April, May, and June, and the mean temperature at the capital varies from 60° in January to 96° in May. There are five rain-gauge stations; the annual rainfall for the whole State averages between 25 and 26 inches, varying from a little over 30 inches at the capital to under 20 at Baseri in the north-west. Since 1880 the year of heaviest rainfall has been 1887, when nearly 40 inches fell, while in 1883 only about 10 inches were received.

History.

Of the earlier history of the territory now forming the Dholpur State very little is known. According to local tradition the Tonwar Rājputs, who ruled at Delhi from about 792 to 1164, held the country, and the western portion certainly belonged at one time to the Jādon Rājputs of Karauli. When Muhammad Ghorī overthrew the Kanauj kingdom in 1194, he and his generals took the forts of Bayānā and Gwalior, which commanded all this part of the country, and from that time to the date of Bābar's invasion (1526) there must have been much fighting along the Chambal. In 1450 Dholpur had its own Rājā or Rai, who in 1487 came out to meet Sultān Bahlol Lodī, and, on presenting him with some *mans* of gold, was treated as a well-wisher. In 1500 the Rai's name was apparently Mānik Deo; and Sikandar Lodī proceeded against him in person, took the fort of Dholpur in the following year, and plundered the country. Within a few months the district was given to Vinayak Deo (possibly a son of the previous ruler), but in 1504 the command of the fort was transferred to a Muhammadan official.

The victory of the emperor Bābar at KHĀNUA (1527) gave all this country to the Mughals, though Dholpur held out for a short time; but under Akbar the State formed part of the *Sūbah* or province of Agra, and the capital was for many years the residence of imperial governors. In 1658 the battle for empire between the sons of Shāh Jahān was fought out at Sāmogarh (now in Agra District), in which Aurangzeb proved victorious, and the gallant Rao Chhatarsāl of Būndi was slain fighting on the side of Dārā. Again, after the death of Aurangzeb in 1707, the struggle for supreme power between his sons, Shāh Alam (afterwards Bahādur Shāh) and Azam Shāh, was also fought close to this territory and the latter was killed. Shortly after, Rājā Kalyān Singh Bhadauria (from the Etāwah District of the United Provinces), taking advantage of the troubles which beset the new emperor on every side, obtained possession of Dholpur; and the Bhadaurias remained undisturbed till 1761, when the Jāt Rājā, Sūraj Mal of Bharatpur, after the battle of Pānīpat, seized upon Agra and overran the country to the Chambal. During the succeeding forty-five years Dholpur changed masters no less than five times. In 1775 it shared the fate of the rest of the Bharatpur possessions, which were seized by Mirza Najaf Khān;

on the death of the latter in 1782 it fell into the hands of Sindhia: on the outbreak of the Marāthā War in 1803 it was occupied by the British, by whom, in accordance with the Treaty of Sarji Anjangaon, it was restored to the Gwalior chief; in 1805, under fresh arrangements with Daulat Rao Sindhia, it was resumed by the British, who finally in 1806, uniting the districts of Dholpur, Bāri, and Rājākhera with the *tāluka* of Sir Muttra into one State, made it over to Mahārāj Rānā Kīrat Singh in exchange for his territory of Gohad, which was given up to Sindhia.

The ruling family of Dholpur are Jāts of the Bamraolia clan, the latter name being derived from Bamraoli near Agra, where an ancestor of the family is said to have held lands about 1195. They joined the side of the Rājputs against the Musalmāns, and received a grant of the territory of Gohad about 1505, when the title of Rānā was assumed. In 1761, when the Marāthās had been defeated at Pānīpat, Rānā Bhīm Singh seized the fort of Gwalior, but it was retaken by Sindhia in 1777. In order to form a barrier against the Marāthās, Warren Hastings made a treaty in 1779 with the Rānā, and the joint forces of the British and the Rānā recaptured Gwalior. This treaty is a document of some curiosity, having been negotiated in the infancy of our acquaintance with the political affairs of Northern India. In 1781 a treaty with Sindhia stipulated for the integrity of the Gohad territories; but after the Treaty of Sālbai (1782) the Rānā was abandoned on the ground that he had been guilty of treachery, and Sindhia soon possessed himself of Gohad and Gwalior. The Rānā remained in exile until Lord Wellesley's policy against the Marāthās again brought him forward, and under the treaty of 1804 he recovered Gohad and certain other districts; but in 1805 they were retransferred to Sindhia, and in exchange the Rānā obtained the territory which he now possesses. The first Rānā (or more correctly Mahārāj Rānā) of Dholpur was Kīrat Singh; his son, Bhagwant Singh, succeeded in 1836, and for valuable assistance rendered in the Mutiny received the insignia of K.C.S.I.; he was made a G.C.S.I. in 1869 and died in 1873. The third chief was Nihāl Singh, grandson of Bhagwant Singh; he was an honorary major in the Central India Horse and received the C.B. and Frontier medal for services in the Tīrāh campaign. He died in 1901, and was succeeded by his eldest son, Rām Singh, the present chief, who was born in 1883, was for a short time at the Mayo College at Ajmer, subsequently joined the Imperial Cadet Corps, and was invested with powers in 1905. The Rānā of Dholpur is entitled to a salute of 15 guns.

There is not much of archaeological interest in the State. South of the capital on the left bank of the Chambal is a very old fort, which, since about 1540, has been called Shergarh after Sher Shāh, who much

enlarged it. It is now crumbling away. Some mosques and tombs of the sixteenth and seventeenth centuries stand in the vicinity of the capital; and the remains of a palace, built about 1617 for Shāh Jahān, lie 3 miles south-east of the town of BĀRI.

Population.

Excluding the village of Nimrol near Gohad in Gwalior (which still belongs to the Rānā, and of which the population in 1901 was 523), there are 543 towns and villages in Dholpur. The population at the last three enumerations was: (1881) 249,657, (1891) 279,890, and (1901) 270,973. The decrease of 3 per cent. in the last decade is ascribed to emigration during the famine of 1896. The State is divided into five *tahsīls*: namely, Gīrd, Bāri, Baseri, Kolāri, and Rājākhera; and the estate of Sir Muttra. The head-quarters of these (except of Gīrd, which is at the capital, and of Kolāri, which is at Sepau) are at the places from which each is named. There are only three towns: namely, the capital, BĀRI, and RĀJĀKHERA. The following table gives the chief statistics of population in 1901:—

Tahsīl.	Area in square miles.	Number of		Population.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.			
Gīrd	240	1	151	67,303	−12·3	1,583
Bāri	288	1	115	54,999	+ 0·7	877
Baseri	193	...	88	50,825	+ 4·3	334
Kolāri	122	...	76	43,697	− 6·7	432
Rājākhera	156	1	77	34,298	+ 0·6	407
Sir Muttra (estate)	198	...	33	19,851	+ 7·5	314
State total	1,197	3	540	270,973	− 3·2	3,947

More than 92 per cent. of the total are Hindus and 6 per cent. Muhammadans. The language mainly spoken is Hindī.

The principal castes are Chamārs (leather-workers and cultivators), who number 43,000; Brāhmans (petty traders and cultivators), 34,000; Kāchhīs or Mālis (industrious agriculturists), 22,500; Rājputs (cultivators and in State service), 22,000; and Gūjars, 21,000, who mostly inhabit the *Dāng*. As recently as 1897 the Gūjars were notorious for their raids into Gwalior and Karauli, but they are now generally peaceful cultivators. The main occupation is agriculture, more than 74 per cent. of the people living by the land.

Agriculture.

The soil varies in different parts, but, except on and in the vicinity of the sandstone ridge, is generally excellent. In the north and north-west a mixture of sand and clay, known as *domat*, is as productive as the best land in Agra District, while in the north-east an area of about 90 square miles is covered with black

soil. In the ravines of the Chambal, and to a certain extent in those of the other rivers, there is a good deal of alluvial mud (*kachhār*), on which fine crops are raised. According to the State records, the area of Dholpur is a little over 1,197 square miles, of which nearly 900 square miles, or three-fourths, are *khālsa* or fiscal, the rest being held on special tenures by individuals or charitable and religious institutions. Statistics are available only for the *khālsa* area; and they show about 535 square miles as cultivable, and 365 as occupied by rivers, tanks, hills, village sites, or otherwise barren. According to these statistics, there has been a steady, if small, increase in the cultivated area since 1900. The average area cropped annually during the decade ending 1900 was nearly 360 square miles, while the areas cultivated in 1900–1 and 1903–4 were about 388 and 405 square miles respectively. The principal crops and the area (in square miles) under cultivation in each case in 1903–4 were: *bājra*, 176; *moth*, 39; *jowār*, 38; cotton, 50; wheat, 21; gram, 19; and barley, 16.

The State has no particular breed of cattle, goats, or sheep. Horse- or pony-breeding is encouraged; stallions are maintained at the head-quarters of the *tahsīls*, and prizes are given for the best locally bred animals shown at the Sarad fair held yearly at the capital.

Of the total *khālsa* area cultivated in 1903–4 about 154 square miles, or 38 per cent., were irrigated, as compared with 127 square miles recorded in the last settlement report. Irrigation is mainly from wells, of which there are said to be 12,667 (4,501, or 35 per cent., being masonry); and the water is obtained either by the usual leathern bucket drawn up by a pair of bullocks or, in the case of shallow wells, by means of an earthen pot attached to one end of a long bamboo, a heavy weight being fixed at the other extremity, the whole contrivance being called a *dhenkli*. The area irrigated from tanks is small, and lies mostly in the western half of the State. There are said to be 75 tanks of sorts, but some are unserviceable and others so small as to be of little value. A very promising irrigation work, to be called the Rām Sāgar after the young chief, is now under construction at Seheri, 3 miles south of Bāri; it is estimated to cost 2·5 lakhs and to be capable of storing sufficient water to irrigate about 10,400 acres.

There are no real forests; but in several tracts common trees, such as the *dhao* (*Anogeissus pendula*), the *khair* (*Acacia Catechu*), and others locally called *pīlu*, *chaunkhar*, *karel* (*Capparis aphylla*), and *jherbera*, are found. These tracts are looked after by a small staff under each *tahsīldār*, who is Deputy Forest officer under a Forest committee. Grass reserves or *rūndhs* supply fodder for the State elephants, horses, and cattle, any surplus being regularly stacked to provide against possible scarcity in future years. The forest revenue, derived mainly

from the sale of firewood and charcoal, is insignificant, being about Rs. 1,700 a year.

The red sandstone of Dholpur is most valuable for building purposes; fine-grained and easily worked, it hardens by exposure, and does not deteriorate by lamination. The principal quarries are at Narpura, 4 miles north-west of the capital, with which they are connected by a railway siding, and near Bāri; they are worked on the petty contract system, and in 1900–1 yielded a net profit of Rs. 13,300, which had increased to Rs. 21,300 in 1904–5. *Kankar* or nodular limestone is found in many places in the ravines leading to the rivers, and a bed of excellent limestone occurs on the banks of the Chambal within 2½ miles of Dholpur town. In the Bāri district there are remains of iron and copper-workings, and a metal believed to be manganese has been recently found there.

Trade and communications.

There are no manufactures of importance. The chief exports are sandstone, cotton, *ghī*, and in good years wheat, gram, *bājra*, *til*, and mustard-seed; and the principal imports include salt, cloth, sugar, rice, and tobacco. The trade is mainly with Agra District and Gwalior.

Since January, 1878, the Indian Midland section of the Great Indian Peninsula Railway has traversed the eastern part of the State from north to south; its length within Dholpur territory is about 19 miles, and there are two stations, at Mania and the capital. The line crosses the Chambal by a fine bridge made of the sandstone of the country, with eleven spans of 200 feet each and two spans of 100 feet each. A steam tramway is being made to connect the quarries near Bāri with the railway at Dholpur.

The trunk road from Agra to Bombay runs for about 18 miles through the State; it was constructed, and is still maintained, by the British Government. The only other metalled roads are in or near the capital; their length is a little over 11 miles, and they are kept up by the State. The total length of unmetalled fair-weather roads is about 109 miles.

Ferries are maintained at 16 *ghāts* between the Dholpur and Gwalior banks of the Chambal. The principal crossing is at Rājghāt, 3 miles south of the capital, where the British Government keeps a bridge of boats in the dry season and a large ferry-boat in the rains, the net profits being divided equally between the two States concerned.

There are six Government post offices, namely, at the head-quarters of each *tahsīl* and at Sir Muttra; and there is a telegraph office at the capital. The State also keeps up a staff of *harkāras* or runners for the carriage of official correspondence between the capital and the head-quarters of the various districts.

The only recent years of actual famine appear to have been 1868–9,

sidered as owners of the land actually cultivated by them and their tenants, and also of uncultivated land sufficient for the grazing of the village cattle. The actual cultivators hold on leases, sometimes annual and rarely for longer periods than three years, granted by the *zamīndār* of the village or of the *thok* or *pattī* (subdivision) in which their land is situated. Within the period of this lease their payments are not enhanced, and provided they pay the demand they are not ejected; but they have no tenant-right, properly so called, by either law or custom.

Previous to 1879 there had been no attempt at any regular survey or settlement since the time of Akbar. In Rānā Kīrat Singh's time the nominal demand stood at about 5·4 lakhs; and the assessment appears to have been periodically raised on arbitrary grounds, and without proper inquiry, till it reached the sum of nearly 10 lakhs, though it is doubtful whether anything approaching this was ever collected. In 1875 a regular survey and settlement was begun, and a demand of 7·1 lakhs was announced in 1879 for a period of twelve years. In 1892 a so-called resettlement was made by a local official, raising the demand to 8·2 lakhs; this expired in 1904, but has been extended for a short term. The land revenue is paid entirely in cash; and the rates per acre vary from Rs. 50 for the best *gonda*, or the belt round the village, to 8, or even 4, annas for the worst *hār*, or the land farthest from the village site and the least productive.

Very little poppy is grown in Dholpur, and the export of opium into British territory is prohibited by the Salt agreement of January, 1879. Under rules issued in 1902 opium can be imported only on passes granted by the Darbār, and cultivators can sell only to licence-holders. By the agreement last mentioned the manufacture of salt is prohibited and no duty of any kind is leviable on it; as compensation, the State receives from Government Rs. 60,000 yearly, and 300 maunds of Sāmbhar salt free of cost and duty. The right to sell liquor (European and country) and intoxicating drugs is leased annually for about Rs. 5,000, and the revenue from the sale of stamp-papers and court-fee stamps averages about Rs. 10,000.

The Public Works department has for some years been under European supervision; the average sum available for expenditure used to be Rs. 60,000 a year or less, but the usual allotment is now about 1·5 lakhs. The actual expenditure in 1903–4 was 2·3 lakhs, rising to 4·5 lakhs in 1904–5. The principal works carried out since 1881 include an Agency house, public offices, a hospital, a jail, lines for troops, and a few irrigation tanks.

The military force has recently been considerably reduced, and in 1905 numbered 1,216 of all ranks: namely, cavalry, 183, of whom 60 were irregular; infantry, 994, of whom 570 were irregular; and

artillerymen, 39. Of the 32 guns, 17 are said to be serviceable. The cost of the army, including office establishment and pensioners, is about 1·2 lakhs a year.

For police purposes the State is divided into ten *thānas* or police circles; and the force, including about 355 village *chaukīdārs*, consists of 770 men, all unmounted. The Nāzim is the head of the police and is assisted by the various *tahsīldārs*.

The only criminal tribe is that of the Kanjars, a few of whom have been settled at Pachgaon, 5 miles north-west of the capital. At first land was given to them rent-free, but they now pay the usual assessment.

The State jail was for many years at Purāni Chhaoni, 3 miles west of Dholpur town, and the building was quite unsuited for a prison. A fine jail has now been built close to Dholpur railway station at a cost of a lakh, and the prisoners were transferred there in 1903. Small lock-ups are maintained at the head-quarters of each district.

The proportion of educated males and females is lower in Dholpur than in any other State of Rājputāna. According to the Census of 1901, only 1·4 per cent. of the population were literate: namely, 2·6 per cent. of the males and 1·1 per cent. of the females. There are 7 State schools and 20 private institutions, attended by about 900 boys. No fees are taken from the pupils, and the schools cost the Darbār about Rs. 3,000 a year.

The State possesses one hospital and three dispensaries, including that attached to the jail. There is accommodation for in-patients only at the capital. In 1904 the number of cases treated was 27,000 (235 being in-patients), and 1,118 operations were performed. The total cost of these institutions was Rs. 6,200, excluding the allowance of about Rs. 4,000 to the Agency Surgeon for supervision.

A staff of seven vaccinators under a native Superintendent is maintained. In 1904–5 they successfully vaccinated 11,179 persons, or about 41 per 1,000 of the population, at a cost of Rs. 1,000.

[*Rājputana Gazetteer*, vol. i (1879, under revision); *Settlement Report* (1894); H. E. Drake-Brockman, *Gazetteer of Eastern Rājputāna States* (Ajmer, 1905); *Administration Reports of Dholpur* (annually from 1894–5).]

Dholpur Town.—Capital of the State of the same name in Rājputāna, situated in 26° 42′ N. and 77° 53′ E., on the Indian Midland section of the Great Indian Peninsula Railway, and on the grand trunk road between Agra and Bombay, about 34 miles south of Agra and 40 miles north-west of Gwalior. It is also the head-quarters of the Gīrd *tahsīl*. Population (1901), 19,310. The original town is supposed to have been built in the beginning of the eleventh century, a little to the south of the present capital, by Rājā Dholan (or Dhāwal) Deo,

be descended from an elder branch of the same race. The chief of Dhrāngadhra entered into engagements with the British Government in 1807. He is entitled to a salute of 11 guns, and bears the title of Rāj Sāhib. He holds a *sanad* authorizing adoption, and the succession follows the rule of primogeniture.

The population at the last three enumerations was: (1881) 99,686, (1891) 103,754, and (1901) 70,880, showing a decrease of 31 per cent. during the last decade owing to the famine of 1899–1900. In 1901 Hindus numbered 61,854, Musalmāns 4,416, and Jains 4,584. There are 2 towns and 132 villages. The capital is DHRĀNGADHRA TOWN.

With the exception of a small extent of rich black loam, the soil is of inferior quality. The total area of cultivated land is 206 square miles, of which only 4 square miles are irrigated. The principal crops are cotton and the common varieties of grain. The manufactures are salt, copper and brass vessels, stone hand-mills, cloth, and pottery. Two ginning factories are at work in the State. In 1903–4 the imports were valued at 5½ lakhs and the exports at 1⅓ lakhs. The State maintains a railway line, 21 miles in length, between Dhrāngadhra and Wadhwān. There is only one made road, connecting Dhrāngadhra with Wadhwān, but the country tracks permit the passage of pack-bullocks. Dholera, in Ahmadābād District, about 70 miles to the south-west of Dhrāngadhra town, is the nearest port.

Dhrāngadhra ranks as a first-class State in Kāthiāwār. The chief has power of life and death over all persons, the trial of British subjects for capital offences, however, requiring the previous permission of the Agent to the Governor. The land revenue is for the most part based on a division of produce. The gross revenue of the State in an ordinary year is about 5 lakhs. The chief pays to the British Government and to the Nawāb of Junāgarh a tribute of Rs. 44,677. Transit dues are not levied. The State contains 3 municipalities, and maintains a military force of 335 men, of whom 75 are mounted, and a police force of 229 men, of whom 29 are mounted. There are 4 jails with a daily average (1903–4) of 31 prisoners. Workshops are attached to the Dhrāngadhra jail. The number of schools is 39, attended by 1,822 boys and 360 girls in 1903–4. The State maintains one hospital and two dispensaries which afforded relief in 1903–4 to 21,826 persons. In the same year 1,774 persons were vaccinated.

Dhrāngadhra Town.—Capital of the State of the same name in Kāthiāwār, Bombay, situated in 22° 59′ N. and 71° 31′ E., 75 miles west of Ahmadābād, the terminus of the Dhrāngadhra Railway, which meets the other Kāthiāwār lines at Wadhwān. Population (1901), 14,770. The town is fortified. Its name is probably derived from the Sanskrit *dharāng*, 'a stone,' and *dhara*, 'a holder,' as the place is very strong and abounds in quarries. The town is entirely built of the local

stone, which is famous throughout Gujarāt. There is a hospital which treated 13,750 patients in 1903–4.

Dhrol State.—State in the Kāthiāwār Political Agency, Bombay, lying between 22° 4′ and 22° 42′ N. and 70° 24′ and 70° 45′ E., with an area of 283 square miles. The country is for the most part undulating and rocky. The climate, though hot in the months of April, May, and October, is generally healthy. The annual rainfall averages 25 to 30 inches in good years.

The chief is by caste a Rājput of the Jādeja family, with the title of Thākur Sāhib. The first of the line was Hardolji, brother of Jām Rāwal, the founder of the Navānagar State. The ruler entered into engagements with the British Government in 1807. The chief is entitled to a salute of 9 guns. He holds a *sanad* authorizing adoption, and the succession follows the rule of primogeniture.

The population at the last three enumerations was: (1881) 21,777, (1891) 27,007, and (1901) 21,906, showing a decrease of 20 per cent. during the last decade owing to the famine of 1899–1900. In 1901 there were 18,669 Hindus, 2,477 Musalmāns, and 760 Jains. The State contains one town, DHROL, the capital, and 67 villages.

The soil is generally light, and is irrigated by water drawn from wells and rivers by means of leathern bags. In 1903–4 the area under cultivation was 72 square miles, of which about 5 square miles were irrigated. The chief crops are sugar-cane and the ordinary varieties of grain. Coarse cotton cloth is manufactured to a small extent. The produce of the State is chiefly exported from Jodiya, a town on the coast. In 1903–4 the imports were valued at one lakh, and the exports at Rs. 24,000.

Dhrol ranks as a second-class State in Kāthiāwār. The chief is entitled to a salute of 9 guns, and has power of life and death over his own subjects. The gross revenue is estimated at about 1¼ lakhs, chiefly derived from land. No transit dues are levied. The chief pays a tribute of Rs. 10,231 jointly to the Gaikwār of Baroda and the Nawāb of Junāgarh, and maintains a police force of 32 men including a few mounted men. There is one municipality at Dhrol. The State contains 8 schools with 531 pupils, and one dispensary which treated 5,956 patients in 1903–4. In the same year 537 persons were vaccinated.

Dhrol Town.—Capital of the State of the same name in Kāthiāwār, Bombay, situated in 22° 34′ N. and 70° 30′ E., about 32 miles north-west of Rājkot and 24 miles north-east of Navānagar, with both of which the town is connected by a made road. Population (1901), 5,660. There is a dispensary which treated 5,956 patients in 1903–4.

Dhubri Subdivision.—Subdivision of Goālpāra District, Eastern

Bengal and Assam, lying between 25° 28′ and 26° 54′ N. and 89° 42′ and 90° 59′ E., with an area of 2,959 square miles. Part of the subdivision consists of a long and narrow strip between the Gāro Hills and the Brahmaputra, which, with the land immediately to the north of the river, is exposed to injury from flood, and is to some extent broken up by hills and marshes. The tract lying under the Himālayas, known as the Eastern Duārs, is free from both of these disabilities. The annual rainfall at Dhubri town averages 94 inches, but in the north of the subdivision it is about 130 or 140 inches. The population in 1901 was 329,102, compared with 317,781 in 1891, giving a density of 111 persons per square mile. The Eastern Duārs are very sparsely populated. The head-quarters of the subdivision and District are at DHUBRI TOWN (population, 3,737). Mustard and long-stemmed rice are largely grown in the riverain tracts, and jute is an important crop. There is also a considerable area under wheat in the GAURIPUR estate, though this cereal is only grown in small patches in the rest of Assam. Almost all of the inhabitants are Mechs and Rabhās, members of the great Bodo race, whose system of cultivation depends largely on irrigation, which enables them to raise large crops of rice from comparatively inferior soil. The subdivision contains 780 square miles of 'reserved' forest, most of which lies under the hills, and produces *sāl* (*Shorea robusta*). For administrative purposes, Dhubri is divided into the five *thānas* of Dhubri, Agamanio, Bilāsipāra, South Sālmāra, and Manikarchar, and contains 1,076 villages. The greater part of the subdivision is permanently settled.

Dhubri Town.—Head-quarters of Goālpāra District, Eastern Bengal and Assam, situated in 26° 1′ N. and 89° 59′ E., on the right bank of the Brahmaputra, at the point where the river turns south to enter the plains of Bengal. The town is connected by the Eastern Bengal State Railway with Calcutta, and is a port of call for the river steamers, while a steam ferry on the Brahmaputra connects it with the trunk road that runs along the south bank of the river to the eastern end of the Assam Valley. It occupies a small spit of land about one-third of a square mile in area, which suffers severely from the erosive action of the river. The population shows no tendency to increase; it was 2,893 in 1881, 4,825 in 1891, and 3,737 in 1901.

The head-quarters of the District were transferred from Goālpāra to Dhubri in 1879; and, in addition to the usual public offices, the town contains a small church, a jail with accommodation for 34 prisoners, a public library, and a marble statue of Queen Victoria. Dhubri was constituted a municipality under (Bengal) Act V of 1876 in 1883, and (Bengal) Act III of 1884 was applied to it in 1901. The municipal receipts and expenditure during the ten years ending 1902–3 averaged Rs. 10,500. In 1903–4 the income was Rs. 14,000, chiefly derived

from a tax on houses and lands (Rs. 2,700) and fees from markets (Rs. 5,000); while the expenditure was Rs. 13,800, including conservancy (Rs. 3,600) and public works (Rs. 5,700). There is a considerable export trade in jute; but business is tending to leave the town for other centres, such as Bagribāri and Gauripur, as merchants are unwilling to sink money in warehouses at a place which is liable to be carried away by the river. The chief educational institution is a high school, which in 1903-4 had an average attendance of 154 boys.

Dhulātia.—*Thakurāt* in the MĀLWĀ AGENCY, Central India.

Dhūlia Tāluka.—*Tāluka* of West Khāndesh District, Bombay, lying between 20° 38′ and 21° 8′ N. and 74° 26′ and 75° E., with an area of 760 square miles. It contains two towns, of which DHŪLIA (population, 24,726), the head-quarters, is the larger; and 154 villages. The population in 1901 was 104,952, compared with 98,142 in 1891. The density, 138 persons per square mile, is below the District average. The demand for land revenue in 1903-4 was 2·6 lakhs, and for cesses Rs. 17,000. The *tāluka* is crossed by low hills, is watered by the Pānjhra and Bori rivers, and is on the whole fairly wooded and well cultivated. The climate is healthy, except just after the rains. The water-supply, especially in the south, is scanty. The Lower Pānjhra water-works, consisting of the Mukti reservoir, ten dams across the river, and watercourses from the dams, ensure an unfailing supply of water to all lands commanded by them. The reservoir was formed by damming a gorge in the valley of the Mukti, which joins the Pānjhra 2½ miles from Dhūlia. The prevailing soil is red, but there are some patches of excellent black loam. The annual rainfall averages 22 inches.

Dhūlia Town.—Head-quarters of West Khāndesh District, Bombay, and also of the Dhūlia *tāluka*, situated in 20° 54′ N. and 74° 47′ E., on the southern bank of the Pānjhra river, 35 miles north of Chālisgaon, with which it is connected by a branch line of the Great Indian Peninsula Railway. Population (1901), 24,726, including 18,766 Hindus, 5,333 Muhammadans, and 435 Jains. The town is divided into New and Old Dhūlia. In the latter the houses are irregularly built, the majority being of a very humble description; in the former there are regular streets of well-built houses, with a fine stone bridge crossing the Pānjhra. In 1872 Dhūlia was visited by a severe flood, which did much damage to houses and property. Until the beginning of the nineteenth century Dhūlia was an insignificant village, subordinate to LALING, the capital of the Laling or Fatehābād *tāluka*. Under the rule of the Nizām, Laling was incorporated with the district of Daulatābād. The fort of Laling occupies the summit of a high hill, about 6 miles from Dhūlia, overhanging the Agra road and the Avir pass leading to Mālegaon. This stronghold, like all ancient buildings in Khāndesh, is locally ascribed to the Gauli Rāj; but it was more probably built by

the Fārūki kings, whose frontier fortress it subsequently became. To the same Arab princes may be attributed the numerous stone embankments for irrigation found throughout the country, of which those on the Pānjhra river, above and below Dhūlia, are good examples. The old fort at Dhūlia is also assigned to this dynasty, but it was probably, like the village walls, restored and improved by the Mughal governors. The town appears to have passed successively through the hands of the Arab kings, the Mughals, and the Nizām, and to have fallen into the power of the Marāthās about 1795. In 1803 it was completely deserted by its inhabitants, on account of the ravages of Holkar and the terrible famine of that year. In the following year Bālāji Balwant, a dependant of the Vinchūrkar, to whom the *parganas* of Laling and Songīr had been granted by the Peshwā, repeopled the town and received from the Vinchūrkar, in return for his services, a grant of *inām* land and other privileges. He was subsequently entrusted with the entire management of the territory of Songīr and Laling, and fixed his head-quarters at Dhūlia, where he continued to exercise authority till the occupation of the country by the British in 1818. Dhūlia was immediately chosen as the head-quarters of the newly-formed District of Khāndesh by Captain Briggs. In January, 1819, he obtained sanction for building public offices for the transaction of revenue and judicial business. Artificers were brought from distant places, and the buildings were erected at a total cost of Rs. 27,000. Every encouragement was offered to traders and others to settle in the new town. Building sites were granted rent free in perpetuity, and advances were made to both the old inhabitants and strangers to enable them to erect substantial houses. At this time Captain Briggs described Dhūlia as a small town surrounded by garden cultivation, and shut in between an irrigation channel and the river. From the date of its occupation by the British, the progress of Dhūlia appears to have been steady; but it is only since the development of the trade in cotton and linseed that the town has become of any great importance as a trading centre. Coarse cotton and woollen cloth and turbans are manufactured for local use, and a steam cotton-press was opened in 1876 by a Bombay firm. There are now nine ginning factories and six presses employing nearly 2,000 hands. Since 1872 a little colony of Musalmāns from Allahābād, Benares, and Lucknow have settled at Dhūlia, who say that they left their homes on account of poverty. They are Momins or Julāhās by caste, and declare themselves orthodox Muhammadans, but their co-religionists in Dhūlia take them to be Wahhābis. They support themselves by weaving *sārīs* of fine texture, which they sell at a lower rate than the local merchants. In 1873, on the withdrawal of the detachment of regular Native infantry, the Bhīl Corps for a time occupied the lines lying to the south-west of the town, where also are the jail, the courthouse, and

offices, and the dwellings of European officers; but no troops are now quartered in Dhūlia. Briggs's Suburb is the newest and most prosperous part of the town. There is a weekly fair on Tuesday, at which commodities to the estimated value of Rs. 50,000 change hands. The town was constituted a municipality in 1862, and had an average income during the decade ending 1901 of more than one lakh. In 1903–4 the income was Rs. 74,400, chiefly derived from rates and taxes. Dhūlia contains a high school with (1903–4) 425 pupils, an industrial school, a normal class, and six vernacular schools with 845 pupils, of which one, with 74 pupils, is a girls' school. Besides the chief revenue and judicial offices, the town contains two Subordinate Judges' courts, a hospital, and a branch dispensary. The Church Missionary Society maintains a school for both boys and girls.

Dhuliān.—Mart in the Jangipur subdivision of Murshidābād District, Bengal, situated in 24° 42′ N. and 87° 58′ E., on the Bhāgīrathi. The name is commonly applied to a group of five villages, with a population in 1901 of 4,990 persons. Dhuliān is the site of an annual fair and one of the most important river marts in the District, being the seat of a large trade in rice, pulses, gram, wheat and other food-grains. A steamer service plies between Dhuliān and Jiāganj during the rains.

Dhulipnagar (*Dalīpnagar*).—Name sometimes applied to BANNU TOWN, Bannu District, North-West Frontier Province.

Dhumnar.—Archaeological site in Indore State, Central India. *See* DHAMNĀR.

Dhurrumtolla.—Street and Eurasian quarter in Calcutta, Bengal. *See* CALCUTTA.

Dhurwai.—Petty *sanad* State in Central India, under the Bundelkhand Agency, belonging to the HASHT-BHAIYA JĀGĪRS, with an area of about 18 square miles. It is bounded on the north and south by the Jhānsi District of the United Provinces, on the east by Tori-Fatehpur, and on the west by Bijnā. Population (1901), 1,826. The *jāgīrdār* is a Bundelā Rājput of the Orchhā house, being a descendant of Mān Singh, the fourth son of Dīwān Rai Singh, brother of Mahārājā Udot Singh of Orchhā, who on the partition of his father's territories received Dhurwai. After the establishment of British supremacy, Dīwān Budh Singh was confirmed in possession of his land by a *sanad* granted in 1823. The present holder is Dīwān Ranjor Singh, who succeeded in 1851. The holding is subdivided among different members of the family, an unsatisfactory state of affairs which gives rise to much ill-feeling, impoverishes the chief, and paralyses the administration. Number of villages, 10; cultivated area, 6 square miles; revenue, Rs. 8,000. Dhurwai, the chief place, is situated in 25° 19′ N. and 79° 3′ E., 15 miles off the high road from Jhānsi to Nowgong. Population (1901), 777.

Diamond Harbour Subdivision.—South-western subdivision of the District of the Twenty-Four Parganas, Bengal, lying between 21° 31′ and 22° 21′ N. and 88° 2′ and 88° 31′ E., with an area of 1,283 square miles, of which 907 are included in the SUNDARBANS. The southern part of the subdivision exhibits all the typical features of half-formed land through which the estuaries of the Ganges find their way to the sea. In the northern area the tracts along the banks of the Hooghly are salubrious, owing to better drainage, the comparative absence of noxious undergrowth, and the sea-breeze, which blows almost continuously during the south-west monsoon. Farther east, the country is badly waterlogged, by reason of defective drainage. The population in 1901 was 460,748, compared with 402,880 in 1891, the density being 359 persons per square mile. It contains 1,575 villages, one of which, DIAMOND HARBOUR, is the head-quarters; but no town.

Diamond Harbour Village.—Head-quarters of the subdivision of the same name in the District of the Twenty-Four Parganas, Bengal, situated in 22° 10′ N. and 88° 12′ E., on the left bank of the Hooghly river. Population (1901), 1,036. The village is built on both banks of the Hājīpur creek, which is crossed by a ferry. Diamond Harbour was a favourite anchorage of the Company's ships in olden times. It suffered severely in the terrible cyclone of 1864, which swept away large numbers of the inhabitants. A harbour-master and customs establishment are maintained to board vessels proceeding up the Hooghly, and the movements of shipping up and down the river are telegraphed to Calcutta and published, at intervals throughout the day, in the *Calcutta Telegraph Gazette*. Diamond Harbour is connected with Calcutta by a branch of the Eastern Bengal State Railway, and by a metalled road 30 miles long. A mile to the south is Chingrikhāli Fort, where heavy guns are mounted and the artillery from Barrackpore encamp annually for gun practice. It is the head-quarters of the Salt Revenue department; and a quarantine station has been opened for the accommodation of pilgrims returning from Mecca. Steamers cross daily to Geonkhāli in Midnapore, and the Assam steamers also touch here. Diamond Harbour contains the usual public offices; the sub-jail has accommodation for 12 prisoners.

Diamond Island (Burmese, *Thamihla*, 'beautiful daughter').—A solitary jungle-covered islet off the coast of Burma, about a square mile in extent, lying due south of the mouth of the Bassein river in 15° 51′ 30″ N. and 94° 18′ 45″ E., about 8 miles from Negrais Island, and nearly half-way between the mainland and the Alguada Reef lighthouse which lies south of it. It derives its name from the fact that it is more or less diamond-shaped, its angles facing the points of the compass. It is well-known, partly by reason of its rich turtle-beds, partly on account of its being a wireless telegraphy station, from which

communication with the Andamans has been established. It is connected with Bassein by a telegraph line, and is visited by vessels calling for orders.

Dibai.—Town in the Anūpshahr *tahsīl* of Bulandshahr District, United Provinces, situated in 28° 12′ N. and 78° 16′ E., close to the metalled road from Alīgarh to Morādābād and a branch of the Oudh and Rohilkhand Railway. Population (1901), 10,579, which is increasing rapidly. The town is said to have been called Dhundhgarh in the eleventh century, when it belonged to Dhākrā Rājputs, who were expelled by Saiyid Sālār Masūd. A new town was built, called Dhundai, and later Dibai. In the time of Akbar it was the headquarters of a *pargana* in the *sarkār* of Koil. The bazar is composed of brick-built houses, and the town is fairly well drained by the Chhoiyā river, which flows round three sides. Dibai is administered under Act XX of 1856, with an income of about Rs. 5,000. It is a prosperous town, with three cotton-gins, a cotton-press, and an oil-press, employing nearly 500 persons. There are large exports of coarse cloth, cotton, *ghī*, and grain. It contains a flourishing Anglo-vernacular school with 75 pupils, partly supported by market fees and partly by private subscriptions, and a middle school with 150 pupils.

Dībālpur.—Ancient town in the Dīpālpur *tāhsīl* of Montgomery District, Punjab. *See* DĪPĀLPUR.

Dibāng.—A large river which rises in the Himālayas and, after flowing through the hills inhabited by the Mishmis, falls into the Brahmaputra near Sadiyā, in Assam. Its course has never been explored, owing to the difficulty of the country and the inhospitable character of the surrounding tribes. BOMJUR, the most advanced British outpost on the north-east frontier, is situated on the left bank of the river, near the mouth of the gorge through which it debouches on the plains.

Dibru (or Sonāpurā).—River of Assam which flows from east to west, through the southern half of Lakhimpur District, nearly parallel to the Brahmaputra, for about 100 miles, and finally empties itself into that river just below the town of Dibrugarh, to which it has given its name. Of recent years the erosive action of this river has carried away valuable sites in the Dibrugarh bazar.

Dibrugarh Subdivision.—Subdivision of Lakhimpur District, Eastern Bengal and Assam, lying between 27° 7′ and 27° 52′ N. and 94° 30′ and 96° 5′ E., at the eastern end of the Brahmaputra Valley, with an area of 3,254 square miles. The subdivision lies on both banks of the Brahmaputra and is surrounded on three sides by hills; but its boundaries on the north, south, and east have never been definitely determined. The population increased from 190,619 to 286,572, or by 50 per cent., between 1891 and 1901. This enormous

increase was due partly to the natural growth of the indigenous inhabitants, but chiefly to the importation of large numbers of coolies to work on the tea plantations. In 1904 there were 130 gardens with 61,510 acres under plant, giving employment to 175 Europeans and 89,670 natives. The subdivision contains one town, DIBRUGARH (population, 11,227), the head-quarters; and 800 villages. Round Dibrugarh the country is well peopled, the density over considerable areas exceeding 300 persons per square mile, but population falls off towards the hills, where dense forest is found, 300 square miles of which have been 'reserved.' Dibrugarh is well supplied with means of communication, as the Assam-Bengal Railway connects it with the sea at Chittagong, and another railway conveys the coal of MĀRGHERITĀ and the oil of DIGBOI to the Brahmaputra. The rainfall at different places in the subdivision varies from 95 to 112 inches in the year. The assessment for land revenue and local rates in 1903-4 amounted to Rs. 4,76,000.

Dibrugarh Town.—Head-quarters of the District of Lakhimpur, Eastern Bengal and Assam, situated in 27° 28′ N. and 94° 55′ E., on the left bank of the Dibru river, a little above its confluence with the Brahmaputra, and on the trunk road. It is the terminus for steamers coming up the Brahmaputra from Calcutta, and for the Dibru-Sadiyā Railway which joins the Assam-Bengal Railway at Tinsukiā. Population (1901), 11,227.

Dibrugarh is one of the most desirable stations in the plains of Assam. On a clear day there is a charming view of the hills with which it is surrounded, and the heavy rainfall (112 inches) keeps the air cool without rendering it oppressive. It is the head-quarters of the District staff, of a battalion of military police, and of the Assam Valley Light Horse, 185 of whose members were resident in the District in 1904; while the regular garrison consists of the wing of a Native infantry regiment. The jail contains accommodation for 138 prisoners, who are employed chiefly on oil-pressing and bamboo and cane-work. In addition to the usual public buildings, there are a church, a hospital with 98 beds, and a fort which was constructed at a time when the north-eastern frontier was still in an unsettled state. Dibrugarh was constituted a municipality under (Bengal) Act V of 1876 in 1878, and (Bengal) Act III of 1884 was subsequently introduced in 1887. The municipal receipts and expenditure during the ten years ending 1902-3 averaged Rs. 31,000. In 1903-4 the income was Rs. 51,000, the chief sources being a special grant (Rs. 27,000) from Provincial revenues, taxes on houses and lands (Rs.5,400), and conservancy and market fees (Rs.8,900); while the expenditure (Rs. 52,000) included conservancy (Rs. 14,800) and public works (Rs. 13,700). The receipts and expenditure of the cantonment fund in 1903-4 were Rs. 2,600 and Rs. 2,800 respectively. The town is the com-

mercial centre of a District which does not produce enough food to feed its foreign population. Large quantities of grain, oil, salt, piece-goods, and other stores are accordingly imported from Calcutta and distributed to various centres near the tea gardens. There are two stores under European management, which cater for the wants of the planter population, and a large number of native artisans are employed in the workshops of the railway company. Of recent years, the Dibru river has been cutting away the bank on which the bazar is situated, and the Mārwāri merchants, who retain in their hands almost all the wholesale trade, have been compelled to remove their shops farther inland. The town possesses a medical school and a high school. The average attendance at these two institutions in 1903–4 was 93 and 269 respectively. There are four small printing presses in the town, at two of which a weekly newspaper is published in English.

Dīdwāna.—Head-quarters of a district of the same name in the State of Jodhpur, Rājputāna, situated in 27° 24′ N. and 74° 35′ E., about 130 miles north-east of Jodhpur city. Population (1901), 9,410. Its old name is said to have been Drūdwānak; and it was held, first by the Chauhān kings of Sāmbhar, next by the Mughal emperors, and then by the Jodhpur and Jaipur States jointly till it was acquired by Mahārājā Bakht Singh of Jodhpur in the middle of the eighteenth century. The town is surrounded by a substantial stone wall, and contains many fine houses, a post office, a vernacular school, and a hospital. Among buildings of archaeological interest may be mentioned a mosque said to have been built by Akbar, several old temples, and some humble-looking cenotaphs bearing inscriptions dating from the ninth century. A copperplate, inscribed with an important historical record, was found at the village of Daulatpura, 2 miles to the south-east. Immediately to the south and south-east of the town of Dīdwāna is a salt lake, leased to the British Government in 1878 for an annual sum of 2 lakhs. It is about 2¼ miles in length, and its bed is composed of black tenacious mud, very similar in appearance to that of the SĀMBHAR LAKE, beneath which is a stratum of strong brine. The methods of manufacture are simple, and are identical with those followed in olden days. Wells are dug in the bed until the brine springs are reached, about 12 feet from the surface, and the brine is then lifted by a weighted pole and bucket into evaporation pans of rectangular shape, where salt gradually forms. The average yearly out-turn is about 9,000 tons.

[F. Ashton, 'The Salt Industry of Rājputāna' in *The Journal of Indian Art and Industry*, vol. ix, January, 1901.]

Dīg.—Head-quarters of the *nizāmat* and *tahsīl* of the same name in the State of Bharatpur, Rājputāna, situated in 27° 28′ N. and 77° 20′ E., about 20 miles nearly due north of Bharatpur city, and 22 miles west of Muttra. Population (1901) 15,409. The town is walled, and possesses

a post and telegraph office, three schools attended by about 250 boys and 40 girls, and a hospital (containing 10 beds). A municipal board is in charge of the conservancy and lighting of the place, the expenditure of about Rs. 5,000 a year being met partly from State funds. Dīg is a place of great antiquity; its ancient name was Dīrgh (meaning 'large') or Dīrghpura, and it is mentioned in the *Skand Purāna* and the fourth chapter of the *Bhāgavat Mahātmya*. It came into the possession of the Jāts about the beginning of the eighteenth century, but was wrested from them in 1776 by Najaf Khān after a twelve months' siege. It was subsequently restored to Mahārājā Ranjīt Singh of Bharatpur. On November 13, 1804, a British force under General Frazer defeated the army of Holkar close to Dīg. The garrison of the latter place treacherously fired on the victors, so siege was laid to the town on December 16, and a week later it was carried by storm. The fort was subsequently restored to the Jāt chief, and after the capture of Bharatpur by Lord Combermere in 1826 it was dismantled. The town is famous for the palaces built by Sūraj Mal. They are constructed of a fine-grained sandstone quarried at Bansi Pahārpur in the south-east of the State, and are kept in thorough repair. They consist of a quadrangle, the centre of which is a garden laid out with fountains. To the east is a large masonry tank; to the south a marble hall and reservoir; to the north a large building called Nand Bhawan, with an exquisitely carved wooden ceiling; and to the west a building called Gopāl Bhawan, the rear face of which looks out on a large tank. This range of buildings wants, it is true, the massive character of the fortified palaces of other States in Rājputāna, but for grandeur of conception and beauty of detail it surpasses them all.

[For a further description of the palaces, see J. Fergusson, *History of Indian Architecture*.]

Digbijaiganj (*Drigbijaiganj*).—Name of a *tahsīl* in Rāe Barelī District, United Provinces, generally known as MAHĀRĀJGANJ.

Digboi.—Oil-field in the Dibrugarh subdivision of Lakhimpur District, Eastern Bengal and Assam, situated in 27° 23′ N. and 95° 37′ E. In its natural state the surface of the field is covered with dense tree forest which stretches for many miles in every direction. The first well sunk by the Assam Railways and Trading Company in 1888 yielded from 2,000 to 3,000 gallons a month. Thirty-one wells were subsequently drilled by the company referred to and by a private syndicate, but eleven were abandoned, as they yielded little or no oil. The works were taken over in 1899 by the Assam Oil Company, which was formed with a capital of £310,000. A large refinery was built at Digboi, which in 1903 gave employment to 10 Europeans and 569 natives, the output in that year consisting of 1,200,000 gallons of kerosene and 89,000 gallons of other oil, with 573 tons of wax and 63 tons

of candles. The wells vary in depth from 600 to 1,800 feet, and the most productive well, which has a depth of 1,250 feet, is said to yield 50,000 gallons a month. The oil is forced up to the surface by the pressure of the natural gas. Digboi is situated on the Mākum branch of the Dibru-Sadiyā Railway.

Dīgnagar.—Village in the head-quarters subdivision of Burdwān District, Bengal, situated in 23° 26′ N. and 87° 42′ E. Population (1901), 2,717. It is a local market for grain and sugar, and is noted for its brass and bell-metal ware. Shellac and lac dye are also manufactured.

Digras.—Town in the Dārwhā *tāluk* of Yeotmāl District, Berār, situated in 20° 6′ N. and 77° 46′ E. Population (1901), 6,034. The weekly cattle-market held here is the largest in the province.

Digru (or Sonāpuriā).—River of Assam, which rises in the Khāsi Hills, and flows north-eastwards into Kāmrūp District, emerging near the village of Sonāpur, whence it is sometimes locally known as the Sonāpuriā. It joins the Kalang river just above the junction of the latter with the Brahmaputra after a course of 64 miles. In the Khāsi Hills the Digru is known as the Um-thru.

Dihāng.—A large river which falls into the Brahmaputra a little to the west of Sadiyā in Assam. It flows through the hills inhabited by the Abors, and owing to the difficulty of the country and the savage character of the inhabitants, its course has never been explored. The arguments in favour of the view that the Dihāng is identical with the Tsan-po of Tibet will be found in the article on the BRAHMAPUTRA.

Dihing, Burhi.—River of Assam, which rises in the Pātkai range and flows in a westerly direction through Lakhimpur District, till it falls into the Brahmaputra, after a course of about 150 miles. Its principal tributaries are: on the right bank, the Digboi, Tipling, Tingrai, and Sesā; and on the left bank, the Tirāp and Namsang. After leaving the hills, it flows along the southern border of the District past the important settlement at Mārgheritā. It then winds through an outlying spur of the Assam Range, passes Jaipur, the site of an old cantonment, Nahorkhutiya, where it is crossed by the Assam-Bengal Railway, and Khowāng, and during the last part of its course forms the boundary between the Districts of Lakhimpur and Sibsāgar. Boats of 4 tons burden can go as far as Jaipur in the dry season, and above Mārgheritā in the rains. At this time of year small feeder-steamers occasionally come up to Jaipur, to carry away the tea manufactured on the estates which are situated in the neighbourhood. Below Jaipur the floods of the river do some damage, and steps are now being taken to repair an embankment constructed in the time of the Ahom Rājās. The spill water is, however, said to have a fertilizing effect, where the flood is not deep enough to injure the crops. The river is crossed by

two railway bridges and five ferries, and on the eastern border of the District is connected by a channel with the NOA DIHING.

Dihing, Noa.—River of Assam, which rises in the Singpho Hills, and flows west and then north, falling into the Brahmaputra east of Sadiyā, in Lakhimpur District. Through a large part of its course it passes through jungle land, though here and there the villages of Phakials, Singphos, and Assamese are to be found upon its banks. It is not largely used as a trade route; but boats of 4 tons burden can proceed as far as Ningru Samon's village in the dry season and beyond the Inner Line, which marks the effective limits of British jurisdiction, in the rains.

Dikho.—River of Assam, which rises in the hills inhabited by independent Nāgā tribes and falls into the Brahmaputra after flowing north and west through Sibsāgar District. Its total length is about 120 miles, and most of its course through the plains lies in well-populated country, Sibsāgar and Nāzirā being the chief places on its banks. Boats of 4 tons burden can proceed up the river as far as Bihubar in the rains, and to Nāzirā, though with some little difficulty, in the cold season. During the rains a feeder-steamer plies between Nāzirā and the Brahmaputra two or three times a week. Prior to the construction of the Assam-Bengal Railway the Dikho was of considerable importance as a trade route, but some of the traffic has now been diverted to the railway. In the lower part of its course, floods do much damage, and protective embankments are now under construction. The river is spanned by a bridge on the Assam-Bengal Railway at Nāzirā, and crossed at eight points in the plains by ferries.

Dilwāra.—Estate and head-quarters thereof in Udaipur State, Rājputāna. *See* DELWĀRA.

Dimāpur.—Village in Sibsāgar District, Eastern Bengal and Assam, situated in 25° 54′ N. and 93° 44′ E., on the right bank of the Dhansiri river. Population (1901), 566. It is the site of an early capital of the Kāchāri Rājās, which was sacked by the Ahoms in A.D. 1536. The capital was then abandoned, but its ruins and tanks are still to be found among the dense jungle of the Nāmbar forest, a pathless wilderness of trees which stretches for many miles on every side. The following description of these ruins is quoted, in a condensed form, from the *Assam Administration Report* for 1880–1. The site of the city is now overgrown with dense jungle, and till recently, when a small bazar was started, was entirely uninhabited. There are several splendid tanks of clear water, and a walled enclosure, supposed to have been a fort. The walls must originally have been upwards of 12 feet in height by 6 in width, and are built throughout of burnt brick of excellent quality. The enclosure is entered through a Moorish arch in a solid brick-built gateway with some pretensions to architec-

tural beauty. It is as nearly as possible a perfect square, each side being about 800 yards in length and protected on the two sides farthest from the river by a deep moat. Inside the fortification are three small ruined tanks. The most interesting relics are, however, the monolithic pillars, one group of which, ranged in four rows of fifteen each, stands not far from the gateway on the left hand, and another smaller group at a little distance on the right. Of the first group, two rows consist of mushroom-shaped pillars with rounded heads, and the other two of square pillars of a very peculiar V-shape. All are richly covered with tracery of some artistic merit. They are very thick in proportion to their height, the largest standing about 15 feet above the ground with a diameter of 6 feet, and resemble in appearance a set of gigantic chessmen. It is possible that these pillars were erected at the recognized place of sacrifice or to commemorate the Rājā's feasts. At the present day Nāgās erect a round-topped post when they have feasted the village on a *mithan*, and a V-shaped post if they have slain a cow. The wild Was of the Shan States also erect a V-shaped post for each buffalo they offer to the spirits. No trace of inscriptions or written character of any kind has been found. Since the construction of the Assam-Bengal Railway, Dimāpur has become the base of trade for the Nāgā Hills and Manipur.

[*Report of Archaeological Survey, Bengal Circle*, 1902–3.]

Dinājpur District.—District in the Rājshāhi Division of Eastern Bengal and Assam, lying between 24° 55′ and 26° 23′ N. and 88° 2′ and 89° 19′ E., with an area of 3,946 square miles. It is bounded on the north-east by Jalpaigurī, on the north-west and west by Purnea, on the east by Rangpur, on the south-east by Bogra, on the south by Rājshāhi, and on the south-west by Mālda.

Physical aspects.

The country is generally flat, but in the south of the District the elevated tract known as the Bārind rises in low undulating ridges, some of which attain a height of 100 feet. Similar low hills occur also in the north-west along the Kulik river. The country is intersected by numerous rivers, which run during the cold season through comparatively deep and narrow channels, and are at this time easily fordable, but in the rains overflow their banks in a succession of long, narrow marshes. The uplands of the Bārind form a watershed, draining on the west into the MAHĀNANDĀ and on the east into the old Tīsta river. The Nāgar is a tributary of the Mahānandā, forming the boundary between Dinājpur and Purnea. The river bed is rocky in the upper reaches, but becomes sandy lower down, where it is navigable by large boats during the rains; its principal tributary is the Kulik. Other important tributaries of the Mahānandā are the Tāngan and Pūrnabhabā, which join it in Mālda District; they run through the clay country

along shallow valleys bordered by elevated clay ridges, and are navigable by large boats during the rains. The various channels of the TĪSTA still flowing through the District are now known as the Atrai, JAMUNĀ, and KARATOYĀ. The Atrai enters Dinājpur on the north-east from Rangpur, and flowing due south passes into Rājshāhi; it finally empties itself into the Padmā in Pābna District, where it is known as the Baral. The Karatoyā forms the eastern boundary of the District for 50 miles.

The greater part of the District is covered by recent alluvial deposits, consisting of sandy clay and sand along the course of the rivers, and fine silt consolidating into clay in the other parts of the plain. The Bārind, which belongs to an older alluvial formation, is composed of argillaceous beds of a rather pale reddish-brown hue, often weathering yellowish, in which occur *kankar* and pisolitic ferruginous concretions, some found near Dinājpur town being of the size of pigeons' eggs.

Where the ground is not occupied by the usual crops of North Bengal, it is covered with an abundant natural vegetation. Old river-beds, ponds and marshes, and streams with a sluggish current have a copious growth of *Vallisneria* and other plants. Land subject to inundation has usually a covering of *Tamarix* and reedy grasses, and in some parts where the ground is marshy *Rosa involucrata* is plentiful. Few trees grow on these inundated lands; the most plentiful and largest is the *hidjal* (*Barringtonia acutangula*). The District contains no forests, but a considerable portion is covered with scrub jungle, and there are several coppices of *sāl* (*Shorea robusta*); the trees are, however, rather stunted as a rule. A great part of the surface is occupied by grasses, the commonest being *Imperata arundinacea* and *Andropogon aciculatus*. The bamboo, of which several varieties are found, is common throughout the District. The most conspicuous trees are the red cotton-tree (*Bombax malabaricum*), jack-fruit tree (*Artocarpus integrifolia*), *Eugenia Jambolana*, *Zizyphus Jujuba*, and the mango, which are sometimes planted and sometimes self-sown.

Leopards are still very common; and wild hog abound in the tracts covered with scrub jungle and do much damage to the crops. The District was once famous for its fish; but this is no longer the case, and the local supply has to be supplemented by the importation of large quantities from Sāra Ghāt and Manihārī Ghāt on the Ganges, as well as from Purnea. Snakes are very common, and numerous deaths from snake-bite occur during the rains.

There are no extremes of temperature. During the cold season westerly or north-westerly winds blow from the Himālayas, and the temperature is comparatively low, the mean being 66°. In January

the mean minimum temperature is 49°. After the southerly winds commence in March, the temperature rises rapidly, the mean being 75° in March and 83° in April, but the highest point (84°) is not reached till June. The highest mean maximum is 95° in April. Rainfall commences early and is exceptionally heavy after the commencement of the monsoon; the average fall is 12·9 inches in June, 13·9 in July, 11·6 in August, and 11·4 in September, more than three-quarters of the annual fall of 63 inches occurring during these months. The earthquake of 1897 was severely felt throughout the District and caused great injury to property.

History.

Dinājpur is famous for its antiquities[1]. In addition to the fine eighteenth-century temples at Kāntanagar and Gopālganj, many old tanks and ruined buildings are connected by legend with a remote past. Tarpan Ghāt, in the Nawābganj *thāna*, is still pointed out as the place where the sage Vālmīkī, the author of the Rāmāyana, bathed and performed religious rites (*tarpan*); and a mound of bricks in the vicinity is known as Sītākot, and is the spot assigned by tradition as the home of Sītā, Rām's exiled queen. Like other tracts, the country is popularly identified with the *Matsya desa* of the Mahābhārata, under the rule of Virāt, at whose court the Pāndavas took shelter during their exile; some ruins near Ghorāghāt are still known as Virāt's cow-house. It subsequently formed part of Bārendra and later of the kingdom of Paundravardhana, the country of the Pods, whose capital was at Mahāsthān. Dinājpur came into the possession of the Pāl kings in the ninth century, and the stone pillars and copper-plates which have been found here afford numerous traces of this dynasty. The name of Mahī Pāl, the most powerful of the Pāl kings, is still remembered by the people, a large tank being called after him. The stone monolith in the Dhibar *dīghi*, the Budal pillar, and other Buddhist remains probably date from this period. At the beginning of the fifteenth century Rājā Ganesh, a 'Hindu and Hākim of Dynwāj,' who subsequently became a convert to Islām and founded the Dinājpur Rāj, rose to power, and, defeating the Muhammadan king of Bengal, seized the throne in 1404. He reigned for ten years, and was succeeded by his son, Jalāl-ud-dīn Muhammad Shāh, who, with his son Ahmad Shāh, occupied the throne until 1442. Devīkot and Ghorāghāt were important military stations in the time of the Mughals.

When the District first came under British rule, it was notorious for the lawlessness of its inhabitants; and in order to enable the administration to cope successfully with the dacoits who infested it, its limits were gradually circumscribed, and large portions of the

[1] *Reports, Archaeological Survey of India*, vol. xv; *Epigraphia Indica*, vol. ii.

modern Districts of Mālda and Bogra were carved out of it. It was not, however, until recently that it was reduced to its present proportions by the transfer in 1896 of the Mahādebpur *thāna* to Rājshāhi.

Population.

The population of the present area increased from 1,430,096 in 1872 to 1,442,518 in 1881, to 1,482,570 in 1891, and to 1,567,080 in 1901. Dinājpur has long been notorious for its unhealthiness, which was the subject of an official inquiry in 1878, and the country-side is covered with the deserted sites of once flourishing places which have since relapsed into jungle. The birth-rate is considerably higher than the mean for Bengal, but the population is kept down by the havoc caused by the local malarial fevers, which in 1901 caused a mortality of 35·27 per thousand. In that year Dinājpur had the heaviest fever death-rate in Bengal, while in each year of the preceding decade it was one of the six Districts with the highest recorded mortality from this cause. The chief statistics of the Census of 1901 are given below:—

Subdivision.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Dinājpur . .	1,598	1	3,220	637,364	399	+ 4·0	*
Thākurgaon .	1,171	...	1,990	543,086	464	+ 2·2	27,493
Bālurghāt .	1,177	...	2,631	386,630	328	+ 14·2	*
District total	3,946	1	7,841	1,567,080	397	+ 5·7	83,612

* Separate figures for the Dinājpur and Bālurghāt subdivisions are not available. The total number in both subdivisions was 56,119.

The only town is DINĀJPUR, the head-quarters. The density exceeds 500 persons per square mile in the Dinājpur (531) and Thākurgaon (516) *thānas*, while in the Parsā *thāna* it falls to 272. The increase of 5·7 per cent. during the last decade was almost entirely due to immigration from other Districts to the Bārind. There is also much immigration of a temporary character from Bihār and the United Provinces. As usual in North Bengal where the Rājbansi element predominates, there is a large preponderance of males over females. The Northern dialect of Bengali is the vernacular. Musalmāns, with 776,737 persons, constitute nearly half the population, and Hindus, with 726,429 persons, 46 per cent.; the remainder consists chiefly of animistic immigrants from the Santāl Parganas.

The Rājbansis (Kochs), who number nearly half a million or a third of the entire District population, are doubtless the descendants of the aboriginal inhabitants of Northern Bengal, and the Muhammadans are probably derived mainly from the same stock. The Santāls, who have

been steadily pushing their way northward since the beginning of the nineteenth century, and who are reclaiming the Bārind, now number 74,000. No less than 87 per cent. of the population are supported by agriculture, a ratio which is exceeded (in Bengal) only in the neighbouring Districts of Jalpaigurī and Bogra; the proportions of those dependent on industries (5 per cent.), commerce (0·3 per cent.), and the professions (0·8 per cent.), are less than half the average for the whole of Bengal.

A Baptist mission was founded in Dinājpur in 1804, but it has gained very few converts. The total number of native Christians is only 727.

Agriculture.

The soil in the north of the District is a light ash-coloured sandy loam, which is very retentive of moisture and generally produces two crops. Towards the south it changes into the stiff red clay of the Bārind, which ordinarily bears but a single crop. The principal agricultural statistics for 1903-4 are as follows, areas being in square miles:—

Subdivision.	Total.	Cultivated.	Cultivable waste.
Dinājpur	1,598	858	305
Thākurgaon . . .	1,171	594	192
Bālurghāt . . .	1,177	631	222
Total	3,946	2,083	719

Dinājpur is one of the chief rice-growing Districts in Eastern Bengal, and 1,797 square miles, or 86 per cent. of the net cropped area, are under this staple. The winter rice is by far the most important crop, covering nearly 77 per cent. of the net cropped area. It is sown in marshy land in June or July, transplanted, and finally reaped in December. Early rice is sown broadcast in May and reaped in August or September, but this and the spring crops are comparatively unimportant. Rape and mustard are largely grown, and jute has increased sixfold in the last seventy years; it now covers 94 square miles, or $4\frac{1}{2}$ per cent. of the cropped area. The cultivation of sugar-cane has declined, but it still occupies about 39 square miles.

The area under cultivation is being gradually extended, especially in the Bārind, which is being reclaimed by the Santāls. Little use has been made of the Land Improvement and Agriculturists' Loans Acts, except in 1892-3, when Rs. 6,000 was advanced under the latter Act owing to the partial failure of the crops.

The local cattle are small and feeble, but large importations take place from the western Districts, the principal markets being the Nekmard and Alawakhawa fairs.

Coarse gunny cloth is woven by hand, and matting is made. *Photā*, a coarse but strong and durable striped cotton cloth, and a small quantity of a wild silk called *endi* are also manufactured, while reed mats are made in the north-west of the District.

Trade and communications.

The external trade is mainly with Calcutta, the chief exports being rice, jute, and gunny, and the chief imports European piece-goods, salt, kerosene oil, coal, sugar, and gunny-bags. Large quantities of rice are also supplied to the neighbouring Districts, and to Nadiā, Farīdpur, and elsewhere; mustard seed and gram are imported from Purnea, and the latter is exported, chiefly to Jalpaigurī. The railway conveys the bulk of the traffic, but a great deal of rice is carried by the Mahānandā river to the western Districts. The business in jute and kerosene oil is for the most part in the hands of European firms.

The northern section of the Eastern Bengal State Railway (metre gauge) traverses the eastern angle of the District from south to north; the Bihār section leaves the main line at Pārvatīpur junction and runs westwards across the centre of the District, passing through Dinājpur town. Including 43 miles of village roads, the District contains 1,097 miles of road, of which only 2½ miles are metalled. These are all maintained by the District board. The most important are the Ganges-Darjeeling road which passes through Dinājpur town, and the main roads connecting Dinājpur with Purnea, Rangpur, Bogra, and Mālda.

Famine.

The famine of 1874 was severely felt, the price of rice rising to 3 seers 5 chittacks per rupee. Relief was afforded on a lavish scale.

Administration.

For administrative purposes the District is divided into three subdivisions, with head-quarters at DINĀJPUR, THĀKURGAON, and BĀLURGHĀT. At Dinājpur, subordinate to the District Magistrate-Collector, are five Deputy-Collectors. The Thākurgaon and Bālurghāt subdivisions are each in charge of a Deputy Magistrate-Collector.

The civil courts include those of the District and Sessions Judge, of a Sub-Judge at Dinājpur, who is also additional Subordinate Judge of Jalpaigurī, where he holds periodical sittings, and of five Munsifs, of whom two are stationed at Dinājpur and the others at Bālurghāt, Raiganj, and Thākurgaon. Criminal work is disposed of by the courts of the Sessions Judge, District Magistrate, and the Deputy-Magistrates. Dinājpur has an evil reputation for gangs of dacoits, and riots arising out of disputes about land are common.

In 1762, shortly before the British took over the administration of Bengal, the revenue of the District as then constituted was settled at 26 lakhs; this sum, however, was never realized; in the first year

of British rule (1765) it was reduced to 18 lakhs, and nine years later to 15 lakhs. In 1782 Rājā Devī Singh held a farm of the three Districts of Dinājpur, Rangpur, and Idrakpur, and for that first mentioned he agreed to pay 17 lakhs. His exactions, however, drove the cultivators into rebellion, and the assessment was again reduced to 15 lakhs, which remained unaltered until the Permanent Settlement in 1793. Up to this date the greater part of the District had been included in the *zamīndāri* of the Rājā of Dinājpur, but owing to the mismanagement of Rājā Rādha Nāth, the greater portion of his estate was sold in 1796 for arrears of land revenue. The current demand for land revenue in 1903-4 was 15·21 lakhs, payable by 762 estates, all of which are permanently settled except 3 small estates with a revenue of Rs. 54. The average rate of rent is exceptionally low for Bengal proper, being only Rs. 2-4-10 per cultivated acre. The prevailing rates vary in different parts of the District; they ordinarily range between 8 annas and Rs. 3 per acre, but in some parts they do not rise above R. 1-8-0, while in others they occasionally reach Rs. 4, and even Rs. 6 and Rs. 8 for the best jute and tobacco lands. The incidence of land revenue is R. 0-15-6 per acre; owing to the low rates of rent prevalent, this represents 44 per cent. of the rental, a higher percentage than elsewhere in Bengal proper.

The following table shows the collections of land revenue and total revenue (principal heads only), in thousands of rupees :—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	16,24	16,59	15,24	15,11
Total revenue . .	20,32	21,90	20,03	21,61

Outside the municipality of Dinājpur, local affairs are managed by the District board and the local board at Thākurgaon subordinate to it. In 1903-4 the income of the District board was Rs. 1,46,000, including Rs. 82,000 derived from rates; and the expenditure was Rs. 1,78,000, of which Rs. 88,000 was spent on public works and Rs. 40,000 on education.

The District contains 15 *thānas* or police stations and 8 outposts. The regular force under the District Superintendent consisted in 1903 of 3 inspectors, 43 sub-inspectors, 31 head constables, and 394 constables. There was, in addition, a rural police of 319 *daffadārs* and 3,687 *chaukīdārs*. The District jail at Dinājpur town has accommodation for 291 prisoners, and sub-jails at Thākurgaon and Bālurghāt for 18 and 20 respectively.

Education is very backward, though less so than in the adjoining Districts, and of the whole population only 5·3 per cent. (9·9 males and 0·3 females) could read and write in 1901. Considerable progress

has, however, been made of recent years. The total number of pupils under instruction increased from 11,188 in 1881–2 to 21,549 in 1892–3 and to 23,960 in 1900–1, while in 1903–4, 24,761 boys and 2,285 girls were at school, being respectively 20·2 and 2 per cent. of those of school-going age. The number of educational institutions, public and private, in that year was 1,054, including 35 secondary and 998 primary schools. The total expenditure on education was 1·24 lakhs, of which Rs. 9,000 was met from Provincial funds, Rs. 37,000 from District funds, Rs. 1,100 from municipal funds, and Rs. 61,000 from fees.

In 1903 the District contained 9 dispensaries, of which 3 had accommodation for 50 in-patients. About 43,000 out-patients and 733 in-patients were treated during the year, and 1,314 operations were performed. The expenditure was Rs. 17,000, and the income Rs. 20,000, of which Rs. 5,000 was derived from Government contributions, Rs. 2,000 from Local and Rs. 4,000 from municipal funds, and Rs. 8,000 from subscriptions.

Vaccination is compulsory only in the municipality of Dinājpur. In 1903–4 the number of persons successfully vaccinated was 40,000, or 26 per 1,000 of the population.

[Martin, *Eastern India*, vol. ii (1838); Sir W. W. Hunter, *Statistical Account of Bengal*, vol. vii (1876).]

Dinājpur Subdivision.—Head-quarters subdivision of Dinājpur District, Eastern Bengal and Assam, lying between 25° 14′ and 25° 50′ N. and 89° 2′ and 89° 19′ E., with an area of 1,598 square miles. The subdivision is entirely alluvial with the exception of the Nawābganj *thāna* in the south, which lies within the BĀRIND, an elevated tract of undulating country. The population was 637,364 in 1901, compared with 612,617 in 1891; the density is only 399 persons per square mile. It contains 3,220 villages and one town, DINĀJPUR (population, 13,430), the head-quarters; the next most important place is Raiganj, a large trading centre. Ghorāghāt possesses considerable historical interest, and throughout the subdivision are remains associated by tradition with a remote past.

Dinājpur Town.—Head-quarters of Dinājpur District, Eastern Bengal and Assam, situated in 25° 38′ N. and 88° 38′ E., on the east bank of the Pūrnabhabā just below its junction with the Dhāp river. Population (1901), 13,430. Dinājpur was constituted a municipality in 1869. The income during the decade ending 1901–2 averaged Rs. 35,000, and the expenditure Rs. 31,000. In 1903–4 the income was Rs. 45,000, including Rs. 13,000 derived from a tax on persons (or property tax), Rs. 8,000 from a conservancy rate, and Rs. 6,000 from a tax on vehicles. The expenditure in the same year was Rs. 43,000. Two drains were constructed between 1894 and

1900 at a cost of Rs. 20,000. The town contains the usual public offices. The jail has accommodation for 291 prisoners; and the jail industries carried on are oil-pressing, carpet-making, flour-grinding, twine-making, cane and bamboo work, brick-making and *surki*-grinding, and the preparation of treasury money-bags. A high school is managed by Government.

Dīnānagar.—Town in the District and *tahsīl* of Gurdāspur, Punjab, situated in 32° 8′ N. and 75° 28′ E., on the Amritsar-Pathānkot branch of the North-Western Railway, 8 miles from Gurdāspur town. Population (1901), 5,191. Adīna Beg founded the town about 1750, and Ranjīt Singh made it his summer head-quarters. The Hasli river, which formed its chief attraction, has been absorbed in the Bārī Doāb Canal. The municipality was created in 1867. The income and expenditure during the ten years ending 1902–3 averaged Rs. 9,700 and 9,500 respectively. The income in 1903–4 was Rs. 8,600, chiefly from octroi; and the expenditure was Rs. 9,000. The principal local industries are blanket- and shawl-weaving and embroidery, and the manufacture of harness and other leathern articles. The municipality maintains an Anglo-vernacular middle school and a dispensary.

Dinapore Subdivision.—North-western subdivision of Patna District, Bengal, lying between 25° 31′ and 25° 44′ N. and 84° 48′ and 85° 5′ E., with an area of 424 square miles. Owing to plague its recorded population in 1901 was only 315,697, compared with 352,178 in 1891, the density being 745 persons per square mile. The subdivision consists of a tract bounded on the north by the Ganges and on the west by the Son; the land is a dead level, and the soil is alluvial. It contains two towns, DINAPORE (population, 33,699), its head-quarters, and KHAGAUL (8,126); and 791 villages. Dinapore is a military station in the Lucknow division of the Eastern Command; its sepoy garrison was implicated in the Mutiny of 1857. The *dargāh* of Shāh Daulat at MANER, completed in 1616, is a fine specimen of Mughal architecture.

Dinapore Town (*Dānāpur*).—Town in Patna District, Bengal, situated in 25° 38′ N. and 85° 3′ E., 3½ miles from the Dinapore railway station on the East Indian Railway. Population (1901), 33,699, including 10,841 within cantonment boundaries. Of the total, 24,575 are Hindus, 8,105 Musalmāns, and 1,019 Christians. The military force ordinarily quartered at Dinapore, which belongs to the Lucknow division of the Eastern Command, consists of four companies of British infantry, six companies of Native infantry, and a field battery. The town with the subdivision is under a subdivisional officer, and the cantonment under a special Cantonment Magistrate. The road from Dinapore to Bankipore is lined with houses and cottages; in fact Dinapore, Bankipore, and Patna may be regarded as forming one con-

tinuous narrow city hemmed in between the Ganges and the railway. The town is noted for its cabinet-ware; it also contains an iron foundry, and printing and oil presses. It was constituted a municipality in 1887. The municipal income during the decade ending 1901–2 averaged Rs. 17,000, and the expenditure Rs. 14,000. In 1903–4 the income was Rs. 27,000, including Rs. 11,000 derived from a tax on houses and lands; and the expenditure was Rs. 20,000. The annual receipts and expenditure of the cantonment fund during the ten years ending 1901 averaged Rs. 21,600 and Rs. 21,700 respectively; the income in 1903–4 was Rs. 28,000 and the expenditure Rs. 26,000.

The Mutiny of 1857 in Patna District originated at Dinapore. The three sepoy regiments stationed there broke into open revolt in July and went off *en masse*, the majority effecting their escape into Shāhābād District, where they shortly afterwards besieged Arrah. An expedition which was sent from Dinapore to relieve Arrah failed disastrously, but was marked by acts of individual heroism; an account of this attempt will be found in the article on PATNA DISTRICT.

Dindigul Subdivision.—Subdivision of Madura District, Madras, consisting of the four *tāluks* of DINDIGUL, PALNI, KODAIKĀNAL, and PERIYAKULAM.

Dindigul Tāluk.—*Tāluk* in the Dindigul subdivision in the north of Madura District, Madras, lying between 10° 0′ and 10° 49′ N. and 77° 40′ and 78° 15′ E., with an area of 1,122 square miles. The population in 1901 was 430,524, compared with 391,090 in 1891. It contains one town, DINDIGUL (population, 25,182), the head-quarters; and 209 villages. Deputy-*tahsīldārs* are stationed at Vedasandūr and Nilakottai. The demand for land revenue and cesses in 1903–4 was Rs. 5,02,000, and the *peshkash* paid by the two *zamīndāri* estates of Kannivādi and Ammayanāyakkanūr amounted to an additional Rs. 52,000. The *tāluk* is an undulating plain, bordered by the Palni Hills and the smaller Karandamalai and Sirumalai ranges. The soil, except where enriched by silt from the hills, is generally poor. The cultivation is almost wholly unirrigated, but a large number of wells supply patches of 'wet' cultivation and garden crops. The chief river is the Kodavanār, a tributary of the Amarāvati. Among special crops tobacco may be noted, while plantains and coffee are cultivated on the Sirumalais.

Dindigul Town (*Dindu-kal*, 'the rock of Dindu,' an *asura* or demon).—Head-quarters of the subdivision and *tāluk* of the same name in Madura District, Madras, situated in 10° 22′ N. and 77° 59′ E., on the South Indian Railway. The population in 1901 was 25,182, of whom 18,060 were Hindus, 3,175 Musalmāns, and 3,947 Christians. It was constituted a municipality in 1866. The receipts and expendi-

ture during the ten years ending 1932-3 averaged Rs. 35,900 and Rs. 37,900 respectively. In 1903-4 they were Rs. 43,000 and Rs. 42,700, the former consisting chiefly of the proceeds of tolls, the taxes on houses and land, and fees from markets. A scheme for the supply of the town with water was completed in 1896 at a cost of Rs. 76,600. The extension of the head-works at a further outlay of Rs. 39,000 has been sanctioned.

Situated 880 feet above the level of the sea, Dindigul has a dry and hot but healthy climate. At a few miles' distance rise the masses of the Palni Hills and the Sirumalai range. The staples of local trade are hides, tobacco, and coffee and cardamoms from the estates on the Palni Hills, for the conveyance of which the system of roads radiating from the town affords exceptional facilities. The chief manufacture is cigar-making, 746 hands being employed by a well-known European firm in their factory. Silk thread of peculiar fineness is spun by weavers of the Patnūlkāran community, and Dindigul locks are renowned throughout the Presidency. Being the head-quarters of the subdivision, it contains the office of the divisional officer and also those of an Assistant Engineer, a District Munsif, a *tahsīldār*, and a sub-magistrate. There are two churches, one belonging to the American Mission and the other to the Roman Catholics; and also a hospital and a dispensary. The streets and roads are well laid out, and the substantial nature of the houses shows that the population is flourishing.

Dindigul was formerly the capital of a province which was practically independent of, although nominally subordinate to, the Madura kingdom. The fort which commands the town is built on a remarkable wedge-shaped rock 1,223 feet above the sea, and still remains in good preservation, having been occupied by a British garrison until 1860. As a strategical point of great natural strength dominating the passes which lead into Madura from the Coimbatore country, its possession in former times was frequently keenly contested. Between 1623 and 1659, the years of Tirumala Naik's reign, it was the scene of many encounters between the Marāthās and the Mysore and Madura troops. In the next century Chanda Sāhib (the minister of the Nawāb of the Carnatic), the Marāthās, and the Mysore troops occupied the fort in turn. In 1755 it was garrisoned by Haidar Alī, who used it as one of the bases from which he conducted his operations in the Carnatic, and to thwart British schemes in Trichinopoly and Madura. In the wars with Mysore the fort was captured by the British under Colonel Wood in 1767, and restored to Haidar Alī by treaty in 1769. It was again captured in 1783 by Colonel Lang, and again restored in 1784 under the Treaty of Mangalore. It was finally captured by Colonel Stuart in 1790 and ceded to the East India Company in 1792.

Dindori.—*Tāluka* of Nāsik District, Bombay, lying between 20° 3′

and 20° 27′ N. and 73° 35′ and 74° 1′ E., with an area of 532 square miles. It contains 126 villages, but no town. The head-quarters are at Dindori. The population in 1901 was 66,401, compared with 82,626 in 1891. The density, 125 persons per square mile, is below the District average. The demand for land revenue in 1903–4 was 1·5 lakhs, and for cesses Rs. 10,000. Most of the *tāluka* is hilly. In the north and west there are only a few cart-tracks, and travelling is difficult. A fair road leads to Bulsār through the Sāval pass, and to Kalvān through the Aivan pass. The rainfall is abundant, and the climate in April and May healthy, but in other months malarious. The main stream is the Kādva, used as well as the Bāngangā for irrigation.

Dindorī.—Northern *tahsīl* of Mandlā District, Central Provinces, lying between 22° 26′ and 23° 23′ N. and 80° 20′ and 81° 45′ E., with an area of 2,524 square miles. The population decreased from 145,413 in 1891 to 139,629 in 1901. The density is 55 persons per square mile. There are 854 inhabited villages, but no town. The head-quarters are situated at Dindorī, a village with 945 inhabitants, distant 64 miles from Mandlā by road. Excluding 942 square miles of Government forest, 48 per cent. of the available area is occupied for cultivation. The demand for land revenue in 1903–4 was Rs. 83,000, and for cesses Rs. 10,000. The *tahsīl* consists mainly of masses of precipitous hills covered with forest, with small and sometimes very fertile valleys bordering the numerous streams, and partly of a treeless undulating plain much cut up by nullahs.

Dinga.—Town in the Khāriān *tahsīl* of Gujrāt District, Punjab, situated in 32° 29′ N. and 73° 49′ E., on the Sind-Sāgar branch of the North-Western Railway, 22 miles due west of Gujrāt town. Population (1901), 5,412. The municipality was created in 1874. The income and expenditure during the ten years ending 1902–3 averaged Rs. 4,500. In 1903–4 the income was Rs. 4,000, derived chiefly from octroi; and the expenditure was Rs. 5,500. The town has an Anglo-vernacular middle school maintained by the Scottish Mission, an aided Anglo-vernacular middle school, and a Government dispensary.

Dinhāta.—Head-quarters of a subdivision of Cooch Behār State, Bengal, situated in 26° 8′ N. and 89° 28′ E., on the Rangpur road. Population (1901), 1,207. It contains a high school.

Diodar (with Bhābar).—Petty State under the Political Agency of Pālanpur, Bombay. *See* PALANPUR AGENCY.

Dīpālpur Tahsīl.—*Tahsīl* of Montgomery District, Punjab, lying between 30° 19′ and 30° 56′ N. and 73° 25′ and 74° 8′ E., with an area of 984 square miles. Its south-east border rests on the Sutlej. The population in 1901 was 179,735, compared with 180,455 in 1891. It contains 458 villages, including DĪPĀLPUR (population, 3,811), the head-quarters, which is a place of historical importance. The land

revenue and cesses in 1903–4 amounted to Rs. 2,73,000. The whole of the *tahsīl* lies in the lowlands between the central plateau of the Bāri Doāb and the Sutlej. There is a considerable area of waste land in the north, but the greater part is well supplied by the Khānwāh and the Upper and Lower Sohāg canals. The density of population, 184 persons per square mile, is thus considerably higher than in any of the other *tahsīls* of the District.

Dīpālpur Village (*Dībālpur*, *Deobālpur*).—Head-quarters of the *tahsīl* of the same name in Montgomery District, Punjab, situated in 30° 40′ N. and 73° 32′ E., in the Bāri Doab. Population (1901), 3,811. Deobālpur, the oldest form of the name, is doubtless of religious origin. Old coins of the Indo-Scythian kings have been discovered upon the site; and Cunningham believed that the mound on which the village stands may be identified with the Daidala of Ptolemy. As a fief of Sher Khān (*c.* 1250) it became, with Lahore and Sāmāna, one of the frontier fortresses which defended the Delhi kingdom against Mongol inroads in the fourteenth and fifteenth centuries. In 1285 Muhammad, son of the emperor Balban, met his death in a battle with the Mongols near Dīpālpur, and the poet Amīr Khusrū was taken prisoner. Under Alā-ud-dīn it was the head-quarters of Ghāzi Malik, afterwards the Sultān Tughlak Shāh, and from it he repelled the Mongol raids. Fīroz Shāh Tughlak visited the town in the fourteenth century, and built a large mosque outside the walls, besides bringing a canal from the Sutlej to irrigate the surrounding lands. Near it a Mongol force was defeated in 1358; but though it submitted to Tīmūr (1398) and received a Mongol governor, the people attacked him suddenly, massacred the garrison, and fled to Bhatner. Jasrath, the Khokhar, besieged Dīpālpur in 1423, and Shaikh Alī, the Mongol leader, tried to take it in 1431; but the Malik-ush-Shark, Imād-ul-Mulk, threw troops into the fortress and the Mongols were forced to retreat. In 1524 it was stormed by Bābar, and under Akbar it became the head-quarters of one of the *sarkārs* of the province of Multān. It was still a centre of administration under Aurangzeb. The Marāthās seized it in 1758, but abandoned it shortly afterwards. A family of Afghān freebooters held it for three generations, until in 1807 the last of them was expelled by Ranjīt Singh.

Dīpālpur is situated on the old bank of the Beās, and the decay of the town is to be attributed to the shifting of that river. The restoration of the Khānwāh canal, since the British annexation, has partially revived its prosperity as a centre of local trade. The most noticeable feature in the modern town is the shrine of Bāba Lālu Jas Rāj, a saint much venerated by the higher families of Khattrīs. Dīpālpur has no trade of any importance, but possesses two factories

for ginning cotton, of which one was working in 1904 and gave employment to 18 persons. It contains an Anglo-vernacular middle school and a dispensary.

Diplo.—*Tāluka* of Thar and Pārkar District, Sind, Bombay, lying between 24° 16′ and 24° 50′ N. and 69° 5′ and 70° 7′ E., with an area of 1,503 square miles. The population in 1901 was 16,886, compared with 23,917 in 1891. The *tāluka* contains 42 villages, and is the most thinly populated in the District, with a density of only 11 persons per square mile. The land revenue and cesses in 1903–4 amounted to Rs. 20,000. The head-quarters are at Diplo. The *tāluka* is a desert tract, intersected by frequent sandhills, and, excepting the Kaloi *tapa*, which is watered by the Nāra, depends for cultivation upon the rainfall. The principal crop is *bājra*.

Dīr.—One of the territories included in the Dīr, Swāt, and Chitrāl Agency, North-West Frontier Province, lying between 35° 50′ and 34° 22′ N. and 71° 2′ and 72° 30′ E. It takes its name from the village of Dīr, the capital of the Khān, which lies on the Dīr stream, an affluent of the Panjkora. Politically, the Dīr territory comprises the country drained by the Panjkora and its affluents down to the junction of the former river with the Bājaur or Rūd, and also the country east of this from a point a little above Tīrāh in Upper Swāt down to the Dush Khel country, following the right bank of the Swāt river throughout. The upper portion of the Panjkora valley down to its confluence with the Dīr is called the Panjkora Kohistān or Kohistān-i-Malizai, and of this Kohistān or 'highland' again the upper portion is called Bashkār and the lower Sherīngal. The valley of the Dīr is also known as Kashkār. At Chutiātan, 6 miles below Dīr, the Panjkora is joined by the Dīr and Baraul rivers, and the valley of the latter now forms a part of Dīr. The Maidān valley, which runs into the Panjkora 10 miles above its junction with the Rūd on the right bank, and the Jandol, which joins the Rūd above its confluence with the Panjkora, are also included in Dīr, as are the Dush Khel country, between the Swāt and Panjkora, and the Talāsh valley. The population of Dīr, including all its dependencies, is probably about 100,000; and its area, including the Dīr Kohistān, of which the boundaries are ill defined, is about 5,000 to 6,000 square miles.

The main Panjkora valley is not so wide as that of Swāt, and contains much less alluvial soil; but it is joined by numerous rich lateral valleys, and the greater part of the population live in these. The upper slopes of the hills are thickly wooded, and the Kohistān contains valuable *deodār* forests. The rainfall exceeds that of Swāt; but though the upper valleys have a pleasant climate, the lower, as in Lower Swāt, are hot in summer and unhealthy in autumn. The history and trade are dealt with in the article on SWĀT.

The Khān of Dīr is the overlord of the country, claiming and, when in a position to do so, exacting allegiance from the petty chieftains of the clans, and revenue from the cultivators. Revenue when taken is always the tenth share of the produce (*ushar*) prescribed by Muhammadan law. The country, wherever agriculture is possible, is cultivated and bears rich crops; but the communal system of tenure, with its periodical redistribution of holdings, causes slovenly methods to be universal.

Dīr is mainly held by Yūsufzai Pathāns, its old non-Pāthan inhabitants, the Bashkārs, being now confined to the valley of that name. Both Bashkār and Kashkār have also a considerable Gūjar population. The language of the Pathāns is the pure Yūsufzai Pashtū; but in the Panjkora Kohistān the Bashkārs speak a dialect of their own resembling the Garhwī of the Swāt Kohistān, and the Gūjars still retain their own language, which resembles Punjābi. The Dīr levies, which maintain the security of communications, number 390, including 40 mounted men.

Dīr, Swāt, and Chitrāl.—A Political Agency in the North-West Frontier Province, lying between 34° 15′ and 37° 8′ N. and 71° 2′ and 74° 6′ E., and comprising the territories of SWĀT, DĪR, BĀJAUR, Sam Rānizai, UTMĀN KHEL, and CHITRĀL. On the north-west and north the Agency is bounded by the watershed of the Hindu Kush. On the north-east its boundary runs from Karambar Sar, the most northerly point in Chitrāl, along the spur called the Moshabar range, which forms the watershed between the Gilgit and Chitrāl rivers. South of the Shandur pass it follows the watershed of the range which divides the Swāt and Indus valleys. On the south-east the Agency is bounded by Buner, on the south by Peshāwar District, on the south-west by the Mohmand country, and on the west by Afghānistān. After the relief of Chitrāl in 1896 Dīr and Swāt were formed into a Political Agency, to which Chitrāl, formerly under the Gilgit Agency, was added in the following year. In 1901 the control of the Agency was transferred from the Foreign Department of the Government of India to the Chief Commissioner of the North-West Frontier Province. The head-quarters are at the MALAKAND.

Disai.—River in Sibsāgar District, Eastern Bengal and Assam. *See* BHOGDAI.

Disāng.—River of Assam, which rises in the hills inhabited by independent Nāgā tribes, flows from east to west through Sibsāgar District, and falls into the Brahmaputra about 8 miles north-west of Sibsāgar town. Its approximate length is 140 miles; and the principal tributaries are, on the right bank, the Dimau and Diroi, and on the left, the Taokāk and Safrai. Boats of 4 tons burden can proceed up the Disāng as far as Dillighāt during the rains, and to Mohmārāghāt in

the dry season. Feeder-steamers visit the latter place in the rains to carry away tea. In the lower part of its course the Disāng passes through cultivated land, where its floods cause considerable damage. An embankment, 19 miles in length, has been constructed along the left bank; but this does not afford sufficient protection, and an extension of the work is under consideration. The river is spanned by a bridge on the Assam-Bengal Railway near the Nāmrūp station, and is crossed by eleven ferries.

Disoi.—River in Sibsāgar District, Eastern Bengal and Assam. *See* BHOGDAI.

Diu.—An island forming portion of the Portuguese Possessions in Western India, situated in 20° 43′ N. and 71° 2′ E., and separated from the southern extremity of the peninsula of Kāthiāwār in the Bombay Presidency by a narrow channel through a considerable swamp. Its extreme length from east to west is about 7 miles, and its greatest breadth from north to south 2 miles. The area is 52·5 square kilometres, or 20 square miles. On the north the narrow channel separating it from the mainland is practicable only for fishing-boats and small craft. On the south the face of the island is a sandstone cliff washed by the sea, with deep water close beneath. Several groves of coco-nut palms are scattered over the island, and the hills attain an elevation of about 100 feet. It has a small but excellent harbour, where vessels can safely ride at anchor in 2 fathoms of water. The climate is generally dry and sultry, the soil barren, and water scarce. Agriculture is much neglected. The principal products are: wheat, millet, *nāchni*, *bājra*, coco-nuts, and some kinds of fruit. The entire population of Diu island, according to the Census of 1900, numbered 14,614 persons, of whom 343 were Christians, including 3 Europeans.

The town of Diu stands at the east end of the island, distant 5 miles from Navibandar. In the days of its commercial prosperity, it is said to have contained above 50,000 inhabitants. Some of the dwellings are provided with cisterns, of which there are altogether about 300, for the accumulation of rain-water. Diu, once so opulent and famous for its commerce, has now dwindled into utter insignificance. Not long ago it maintained mercantile relations with several parts of India and Mozambique, but at present its trade is almost stagnant. Besides Diu town there are three large villages on the island: namely, Monakbara, with a fort commanding the channel on the west; Bachawara, on the north; and Nagwa, with a small fort commanding the bay, on the south. The principal occupations of the inhabitants were formerly weaving and dyeing, and articles mauufactured here were highly prized in foreign markets. At present, fishing affords the chief employment to the impoverished inhabitants. A few enterprising persons, however, emigrate temporarily to Mozambique, where they occupy themselves in

commercial pursuits, and, after making a sufficient fortune, return to their native place to spend the evening of their lives. The total revenue of Diu in 1903–4 was Rs. 73,000; in the same year the imports were valued at more than 2½ lakhs and the exports at about 1¼ lakhs.

The Governor is the chief authority in both the civil and military departments, subordinate to the Governor-General of Goa. The judicial department is under a *Juiz Municipal*, with a small establishment to carry out his orders. For ecclesiastical purposes the island is divided into two parishes, called Sé Matriz and Brancawara, the patron saints being St. Paul and St. Andrew. Both parishes are under the spiritual jurisdiction of a dignitary styled the Prior, appointed by the Bishop of Damān. The office of Governor is invariably filled by a European, other posts being bestowed on natives of Goa. The public force consists of 79 soldiers, including officers. The present fortress of Diu was reconstructed, with several later improvements, after the siege of 1545, by Dom João de Castro. It is an imposing structure, situated on the extreme east of the island, and defended by several pieces of cannon, some of which are made of bronze, and appear to be in good preservation. It is approached by a permanent bridge and entered through a gateway, which bears a Portuguese inscription and is defended by a bastion called St. George. The castle is separated from the other fortifications by a deep moat cut through the solid sandstone rock, through which the sea had free passage at one time, but now it enters only at the highest tides. Towards the west of the fortress lies the town of Diu, divided into two quarters, the Pagan and the Christian. The former covers two-thirds of the total area, and is intersected by narrow and crooked roads, lined with houses. Besides the villages on the island already named, the Portuguese possess the village of Gogola, towards the north, in the Kāthiāwār peninsula; and the fort of Simbor, conquered in 1722, and situated on an islet about 12 miles distant from the town.

Diu town was formerly embellished with several magnificent edifices, some of which are still in existence. Of these the most noteworthy is the college of the Jesuits, erected in 1601, and now converted into a cathedral, called Sé Matriz. Of the former convents, that of St. Francis is used as a military hospital; that of St. John of God, as a place of burial; that of St. Dominic is in ruins. The parochial hall of the once beautiful church of St. Thomas serves as a place of meeting for the municipal chamber. The mint, where, in the days of the greatest prosperity of the Portuguese, money of every kind used to be coined, is now gradually falling into decay. The arsenal, once so renowned, contains a few insignificant military stores. Besides these buildings, there are the Governor's palace, a prison, and a school.

Owing to the great advantages which the position of Diu afforded for

trade with Arabia and the Persian Gulf, the Portuguese were fired from an early period with the desire of becoming masters of this island; but it was not until the time of Nuno da Cunha that they succeeded in obtaining a footing in it. When Bahādur Shāh, Sultān of Gujarāt, was attacked by the Mughal emperor Humāyūn, he concluded a defensive alliance with the Portuguese, allowing them to construct, in 1535, a fortress on the island and garrison it with their own troops. This alliance continued till 1536, when both parties began to suspect each other of treachery. In a scuffle which took place on his return from a Portuguese ship, whither he had proceeded on a visit to Nuno da Cunha, the Gujarāt monarch met his death in 1537. In the following year the fortress was besieged by Mahmūd III, nephew of Bahādur Shāh; but the garrison, commanded by Antonio de Silveira, foiled the attempts of the enemy, and compelled him to raise the siege. Subsequently, in 1545, Diu was again closely invested by the same ruler, but was obstinately defended by the gallant band within, under the command of Dom João Mascarenhas. While the Muhammadans were still under the walls, Dom João de Castro landed in the island with large reinforcements, and, immediately marching to the relief of the place, totally routed the army of the Sultān of Gujarāt in a pitched battle. This heroic defence, and the signal victory gained by De Castro, which form a brilliant page in the annals of the Portuguese empire in the East, were followed by the acquisition of the entire island. In 1670 a small armed band of the Arabs of Maskat surprised and plundered the fortress, retiring with the booty they had acquired. Since this event, nothing worthy of note has occurred in connexion with the Portuguese settlement.

Divi Point.—A low headland in the Bandar *tāluk* of Kistna District, Madras, situated in 15° 58′ N. and 81° 10′ E., at the mouth of one of the branches of the Kistna river, and surrounded by shoals for 6 miles south and east. The lighthouse formerly situated on it has now been removed to Point Havelock.

Diwāngiri.—Outpost on the Bhutān frontier in Kāmrūp District, Eastern Bengal and Assam. *See* DEWĀNGIRI.

Doāb ('two rivers').—This name is commonly applied to the land between the confluence of any two rivers, but especially to the tract between the Ganges and Jumna in the United Provinces, extending from the Siwāliks to the junction of the two rivers at Allahābād. The central and lower portions from Etāwah to Allahābād are often termed *Antarved*, the meaning of which is said to be either 'between the waters' or 'within the hearth.' *Antarvedī* is also applied to the dialect of Western Hindī used in the central portion, a variety of Braj. The Doāb includes the Districts of Sahāranpur, Muzaffarnagar, Meerut, Bulandshahr, Alīgarh, parts of Muttra and Agra, Etah, Main-

purī, the greater part of Etāwah and Farrukhābād, Cawnpore, Fatehpur, and part of Allahābād. Naturally a rich tract of alluvial soil, it has been irrigated by three fine engineering works, the UPPER GANGES, LOWER GANGES, and EASTERN JUMNA CANALS; and much has been done to improve the drainage of the land. This is the greatest wheat-producing area in the United Provinces; and it presents an almost unbroken sheet of cultivation, varied only by ravines on the banks of the Jumna and other rivers, and by occasional patches of barren *ūsar* (saline) plain or *dhāk* jungle (*Butea frondosa*). The contrast between this condition and the state of the Doāb at the end of the eighteenth century is striking. In 1794–5 Mr. Twining, a servant of the Company, who travelled from Fatehgarh to Agra, Muttra, Delhi, and back across Alīgarh, described most of the tract as a sandy waste. Although before British rule famine repeatedly devastated this area, canal-irrigation has now rendered the greater part of it safe. In 1896–7 the peasants of the Upper Doāb were able to hold stocks of grain, while almost every other part of the United Provinces was importing. The Fatehpur branch of the Lower Ganges Canal, opened in 1898, will do much for the three Districts nearest the confluence of the Ganges and Jumna. Cawnpore, the largest manufacturing town in the United Provinces, which is also an important collecting and distributing centre, Hāthras, Meerut, Sahāranpur, Allahābād, and Etāwah are the chief commercial marts. Small thriving towns are numerous, and a network of railways crosses the area in every direction, providing excellent means of communication with all parts of India. The Doāb, though it has lain in the track of all invaders from the north, was never an historical entity, and the history of its different portions will be found in the accounts of the Districts composing it.

Dodabetta ('Big mountain').—The highest peak of the Nīlgiri Hills and the second highest point south of the Himālayas, standing in 11° 24′ N. and 76° 44′ E., in the Ootacamund *tāluk* of the Nīlgiri District, Madras, 8,760 feet above the sea and overlooking the station of Ootacamund. In the valleys on its slopes are parts of the Government cinchona plantations, and on its summit stood for many years a meteorological observatory. This was abolished, but has lately been replaced by a better-equipped station.

Dod-Ballāpur Tāluk.—North-western *tāluk* of Bangalore District, Mysore, lying between 13° 7′ and 13° 30′ N. and 77° 19′ and 77° 40′ E., with an area of 341 square miles. The population rose to 74,609 in 1901 from 65,613 in 1891. The *tāluk* contains one town, DOD-BALLĀPUR (population, 7,094), the head-quarters; and 342 villages. The land revenue demand in 1903–4 was Rs. 1,56,000. On the north is a hilly range, covered with jungle, with a pass down to Goribidnūr. The whole *tāluk* is drained by the Arkāvati, which supplies some

large tanks. The west and parts of the south are jungly, with good pasturage, but the country is generally open and the soil fertile. Some tobacco and potatoes are grown.

Dod-Ballāpur Town.—Head-quarters of the *tāluk* of the same name in Bangalore District, Mysore, situated in 13° 18′ N. and 77° 33′ E., on the Arkāvati river, 23 miles from Bangalore city. Population (1901), 7,094. So far back as the twelfth century this was an important place of trade, but the modern town was established at the beginning of the sixteenth century by the chief who also founded DEVANHALLI. Bijāpur, the Marāthās, and the Mughals held it in turn, the first giving it in *jāgīr* to Shāhjī, and the last to Alī Kulī Khān. It was taken by Haidar Alī in 1761. The municipality dates from 1870. The receipts and expenditure during the ten years ending 1901 averaged Rs. 3,000. In 1903–4 they were Rs. 3,300 and Rs. 3,500.

Dodvad.—Village in the State of Sāngli, Bombay, situated in 15° 41′ N. and 75° 1′ E. Population (1901), 4,867. Dodvad has an imposing fort built on a rocky hillock. The walls, which are 20 feet high, are half of stone and white earth and half of bricks. The fort is surrounded by a ditch 25 feet wide and 12 to 19 deep. The rampart, the parapet, and the bastions are in good condition. The village contains a dispensary.

Dohad Tāluka.—Eastern *tāluka* of the Pānch Mahāls District, Bombay, including the petty subdivision (*petha*) of Jhālod, lying between 22° 38′ and 23° 11′ N. and 74° 2′ and 74° 29′ E., with an area of 607 square miles. It contains 2 towns, DOHAD (population, 13,990), its head-quarters, and JHĀLOD (5,917); and 212 villages. The population in 1901 was 90,818, compared with 117,999 in 1891, the decrease, which occurred chiefly in Jhālod, being due to famine. The density, 150 persons per square mile, is slightly below the District average. The land revenue and cesses in 1903–4 amounted to about 1½ lakhs. The *tāluka* is a compact and well-wooded tract, hilly and picturesque throughout. Occasional frosts occur in the cold season. The Anās river flows along the eastern boundary, and several large reservoirs for the storage of water exist.

Dohad Town.—Head-quarters of the *tāluka* of the same name in the Pānch Mahāls District, Bombay, situated in 22° 50′ N. and 74° 16′ E., on the Godhra-Ratlām Railway. Population (1901), 13,990. As the name Dohad (or 'two boundaries') implies, the town is situated on the line separating Mālwā on the east from Gujarāt on the west. It is a place of considerable traffic, commanding one of the main lines of communication between Central India and the seaboard. The strongly built *sarai* dates from the reign of the Gujarāt Sultān Ahmad I (1411–43). It was repaired by Muzaffar II (1511–26), also a Gujarāt monarch, and is said to have been again restored under the orders

of the emperor Aurangzeb (1658–1707). Dohad was constituted a municipality in 1876. The municipal income during the decade ending 1901 averaged about Rs. 13,000. In 1903–4 the income was Rs. 12,000. The town contains a Sub-Judge's court, a dispensary, and 5 schools for boys and one for girls, attended by 176 and 91 pupils respectively.

Dohrīghāt.—Town in the Ghosī *tahsīl* of Azamgarh District, United Provinces, situated in 26° 16′ N. and 83° 31′ E., on the south bank of the Gogra, at the point where the roads from Azamgarh town and Ghāzīpur to Gorakhpur unite and cross the river, and on a branch of the Bengal and North-Western Railway. Population (1901), 3,417. The town is said to have been founded by a Rājā of Azamgarh towards the close of the eighteenth century, and contains a large mosque. It is administered under Act XX of 1856, with an income of about Rs. 900. Dohrīghāt is the chief port on the south of the Gogra in Azamgarh District, and has a large traffic in grain, salt, tobacco, gunny-bags, sugar, and other articles. There is a primary school with 67 pupils.

Dolphin's Nose.—A large headland and well-known landmark for ships, situated in 17° 41′ N. and 83° 19′ E., forming the southern arm of the Vizagapatam harbour in the *tahsīl* and District of that name, Madras. The flagstaff on the summit is about 1,500 feet above the sea. An old ruined battery stands on the hill, and there used to be a lighthouse also, but this was destroyed by the cyclone of 1876 and has not been replaced.

Domār.—Town in the Nilphāmāri subdivision of Rangpur District, Eastern Bengal and Assam, situated in 26° 6′ N. and 88° 50′ E., on the northern section of the Eastern Bengal State Railway. Population (1901), 1,868. It is a large jute-exporting centre, containing jute-presses.

Domariāganj.—North-western *tahsīl* of Bastī District, United Provinces, comprising the *parganas* of Rasūlpur and Bānsī (West), and lying between 27° and 27° 30′ N. and 82° 26′ and 82° 58′ E., with an area of 593 square miles. Population increased from 313,090 in 1891 to 322,321 in 1901. There are 1,111 villages, but only one town, Biskohar (population, 2,725). The demand for land revenue in 1903–4 was Rs. 3,77,000, and for cesses Rs. 70,000. The density of population, 544 persons per square mile, is the lowest in the District. Near the Rāptī, which crosses the *tahsīl* from west to east, is a fertile belt of rich soil called *bhāt*, which does not require irrigation. South of the Rāptī the *tahsīl* forms part of the central upland area, but north of the river it gradually assumes the marshy appearance of the Nepālese *tarai*. The area under cultivation in 1903–4 was 427 square miles, of which 142 were irrigated. Wells and small rivers each supply a fourth of the irrigated area, and tanks and swamps the remainder.

Donabyu.—Township and town in Ma-ubin District, Lower Burma. *See* DANUBYU.

Dongargarh.—Town in the Khairāgarh Feudatory State, Central Provinces, situated in 21° 11′ N. and 80° 46′ E., on the Bengal-Nāgpur Railway, 647 miles from Bombay. Population (1901), 5,856. Dongargarh is the centre of trade for the adjoining tracts of country, and a large weekly grain market is held. A number of railway officials are stationed here, and it is the head-quarters of a company of volunteers. There are a vernacular middle school, a girls' school, and a dispensary.

Dongarpur.—State and capital thereof in Rājputāna. *See* DŪNGARPUR.

Dongkya.—Mountain on the boundary between Sikkim and Tibet, situated in 27° 59′ N. and 88° 48′ E., 50 miles east of Kinchinjunga, where the Chola range leaves the main chain of the Himālayas. Height, 23,190 feet above sea-level. The well-known Dongkya pass (elevation 18,400 feet) at the head of the Lachung valley is 4 miles west of Dongkya peak.

Dooārs.—Tract in Eastern Bengal and Assam. *See* DUĀRS.

Dorka.—Petty State in REWĀ KĀNTHA, Bombay.

Dorunda.—Cantonment in Rānchī District, Bengal. *See* RĀNCHI TOWN.

Dosa.—District and head-quarters thereof in Jaipur State, Rājputāna. *See* DAOSA.

Dowlaishweram.—Town in the Rājahmundry *tāluk* of Godāvari District, Madras, situated in 16° 57′ N. and 81° 47′ E., 5 miles south of Rājahmundry town, on the Godāvari, at the point of bifurcation of the river where the great anicut (dam) has been constructed across it. Population (1901), 10,304. It is the head-quarters of the Executive Engineers of the central and eastern divisions of the District, and contains large Government workshops. In the neighbourhood are quarries yielding good building stone. The town has been constituted a Union.

Dowlatābād.—Hill fort in Aurangābād District, Hyderābād State. *See* DAULATĀBĀD.

Drāfa.—Petty State in KĀTHIĀWĀR, Bombay.

Drigbijaiganj.—Name of a *tahsīl* in Rāe Barelī District, United Provinces, generally known as MAHĀRĀJGANJ.

Drug District.—District in the Chhattīsgarh Division of the Central Provinces, lying between 20° 23′ and 22° N. and 80° 43′ and 82° 2′ E., with an area of 3,807 square miles. The District was constituted in 1906 from portions of Raipur and Bilāspur, which at that time covered an area of 20,000 square miles, and contained a population of 2½ million persons. Drug comprises a portion of the old Mungelī *tahsīl* in

the south-west of Bilāspur, the whole of the former Drug *tahsīl*, and parts of the Simgā and Dhamtarī *tahsīls* in the west of Raipur.

The District consists of a long strip of land running from north to south, narrowest in the centre, where the head-quarters town is situated, and widening out at the extremities. It is bounded on the north by the Khairāgarh and Kawardhā Feudatory States and Bilāspur District; on the east by Raipur District; on the south by the Kānker State; and on the west by the Khairāgarh and Nāndgaon States and Chānda and Bālāghāt Districts. The greater part of the *khālsa*, or area held by village proprietors, is open undulating country bare of hill or jungle. In the centre and north especially the view from the high gravel ridges extends for miles. Trees are scarce in many parts of the open country. The only Government forest is that in the south of the District, which covers more than 164 square miles. The *zamīndāri* estates situated in the north-west and south-west include some hilly country and contain 325 square miles of forest. The Tandulā river flows from south to north and joins the Seonāth flowing west from the Nāndgaon State, a little south of Drug. The Seonāth then turns north and flows in this direction, passing by Drug and Dhamdā. Its principal tributaries from the east are the Pathrā and Barrā, and from the west the Sombarsa and Amner. The climate of Drug is exceptionally hot. The annual rainfall averages about 47½ inches.

In 1901 the population of the area now constituting Drug District was 628,885 persons, compared with 754,548 in 1891, the large decrease being due to the famines of 1897 and 1900. The District has one town, DRUG, and 2,047 inhabited villages. The principal statistics of population, based on the Census of 1901, are shown below:—

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Drug . .	924	1	483	189,643	205	− 15·6	3,124
Bemetāra . .	1,566	...	874	240,843	154	− 17·2	2,997
Sanjāri . .	1,317	...	690	198,399	151	− 17·2	3,938
District total	3,807	1	2,047	628,885	165	− 16·7	10,059

The *mālguzāri* or *khālsa* area is very thickly populated.

A large proportion of the District is covered with rich black soil, while the remainder is the yellow clay and gravel of the Chhattīsgarh plain. In the south the black soil is divided into embanked rice-fields from which second crops are obtained, while in the north wheat and *kodon* are grown in rotation on the same kind of land. The principal

crops are rice, wheat, *kodon*, and linseed. In 1902–3 the area occupied for cultivation was about 950 square miles, of which about 850 were under crop. In the south of the District are a number of irrigation tanks.

The main line of the Bengal-Nāgpur Railway runs through the centre of the District, with stations at Drug and Bhilai. From Drug a road passes through Nankatti, Dhamdā, and Deorbīja to Bemetāra, where it joins the Simgā-Kawardhā road. From Dhamdā a branch runs to Gandai. Other roads are those from Drug to Gundardehī and Dhamtarī and from Arjundā to Rāj-Nāndgaon.

The District contains nine *zamīndāri* estates, with a total area of 1,040 square miles and a population of 99,820 persons.

The approximate land revenue in 1902–3 of the area now constituting the District was 4·72 lakhs.

[E. R. K. Blenkinsop, *Settlement Report on Drug Tahsīl*, 1903.]

Drug Tahsīl.—Central *tahsīl* of the new District of the same name, Central Provinces, which was formed in 1906 from portions of Raipur and Bilāspur. The *tahsīl* lies between 20° 51′ and 21° 33′ N. and 81° 6′ and 81° 37′ E. The area of the former Drug *tahsīl* of Raipur was 1,911 square miles, and its population in 1901 was 313,579 persons. In arranging the new District, an area of 614 square miles contained in six *zamīndāri* estates was transferred to the Bemetāra *tahsīl* and another area of 373 square miles to the Sanjāri *tahsīl*, leaving the revised area and population of the Drug *tahsīl* at 924 square miles and 189,643 persons. The population of this area in 1891 had been 224,589 persons. The *tahsīl* contains 483 inhabited villages, and one town, DRUG (population, 4,002), the head-quarters of the District and *tahsīl*. The *tahsīl* has practically no Government forest. It consists of an open plain of fertile black soil alternating with sandy soil and gravel, and mainly devoted to the cultivation of rice. The land revenue demand in 1902–3 on the present area was approximately 1·55 lakhs.

Drug Town (*durga*, 'a fort').—Head-quarters of the new District of the same name, Central Provinces, situated in 21° 11′ N. and 81° 17′ E., on the Bengal-Nāgpur Railway, 685 miles from Bombay. Population (1901), 4,002. The town contains the ruins of a mud fort said to be of great antiquity, which the Marāthās made the basis of their operations in 1741, when they overran the Chhattīsgarh country. Besides occupying the fort, they formed an entrenched camp on the high ground on which the town stands, and from which a clear view of the surrounding country is to be obtained. Drug is not a municipality, but a small fund is raised for purposes of sanitation. It has a bell-metal industry, and the vessels made are well-known locally. Cotton cloth is also woven, but the weavers have suffered from the competition

of the mills. There are some betel-vine gardens in the neighbourhood and the town contains a vernacular middle school.

Duārābāzār.—Trade centre and railway station in Sylhet District, Eastern Bengal and Assam. *See* DWĀRĀ BĀZĀR.

Duārs, Eastern.—The tract called the Eastern Duārs forms an integral portion of Goālpāra District in the Province of Eastern Bengal and Assam. It lies between 26° 19′ and 26° 54′ N. and 89° 55′ and 91° E., and is bounded on the north by the mountains of Bhutān; on the east by the Manās river, separating it from theDistrict of Kāmrūp; on the south by the main portion of Goālpāra District; and on the west by the Gangādhar or Sankosh river, which separates it from the Western Duārs, attached to Jalpaigurī District, and the Bengal State of Cooch Behār. Area, 1,570 square miles; population (1901), 72,072.

The Eastern Duārs form a flat strip of country, lying beneath the Bhutān mountains. The only elevated tract is Bhumeswar hill, which rises abruptly from the plains to the height of nearly 400 feet, and may be regarded as a detached spur of the Gāro Hills on the south of the Brahmaputra. The remainder is level plain, intersected by numerous streams, and overgrown with wild vegetation. In some parts stretch extensive tracts of *sal* forest; but the greater portion is covered with heavy grass and reed jungle, amid which the beautiful cotton-tree (*Bombax malabaricum*) is the only timber to be seen. The villages are enclosed by a fence of split bamboos to keep out deer. A few bamboos and plantain-trees stand in the enclosure, but there is none of that luxuriant jungle of bamboos, areca palms, and plantain-trees in which the Assamese village is usually embedded. At the foot of the mountains, where the rivers debouch upon the plain, the scenery assumes a grander aspect. The principal rivers are the Manās, Chāmpāmati, Gaurāng, Gangia, Gurupala, and Gangādhar, which are navigable by country boats, for a portion at any rate of their course, throughout the year, and in addition, numerous small streams become navigable during the rainy season. By far the most important channel of communication is afforded by the Manās, which might be navigated by steamers of light draught. All the rivers take their rise in the Bhutān hills, and flow in a southerly direction into the Brahmaputra. Their beds are filled with boulders in the hills, but they become sandy as they advance into the plain. A peculiar tract of pebbles, gravel, and sand, resembling the BHĀBAR in the United Provinces, fringes the hills; and the water of all the minor streams sinks here, during the greater part of the year, not again appearing above ground until it reaches the alluvial clay. The Eastern Duārs were annexed in 1865 after the military operations which the Bhutān government had provoked by their repeated aggressions on British subjects, and the gross

insults to which they subjected the envoy who had been sent to demand redress. They were at first placed in charge of a Deputy-Commissioner, with his head-quarters at the village of Datmā, in the Goālpāra *pargana* of Khuntaghat. In December, 1866, they were incorporated with the District of Goālpāra, and have since shared in all the changes of jurisdiction by which that District has been transferred between Bengal and Assam.

Rice is the staple crop raised in the Duārs. The soil is often light and sandy, but the villagers combine to cut small channels through which they convey the water from the hill streams to their fields, and by this means succeed in raising bumper harvests. Mustard is also grown in the Bijni Duār, but other crops are not of very much importance. The Duārs are, however, very sparsely peopled, and in 1903–4 nearly 93 per cent. of the total area was either waste or forest land. They are altogether five in number: Bijni, area 374 square miles, population (1901) 25,859; Sidli, area 361 square miles, population 31,509; Chirang, area 495 square miles, population 1,081; Ripu, area 242 square miles, population 2,425; and Guma, area 98 square miles, population 11,198.

For the purposes of land revenue collection Chirang, Ripu, and Guma form two *mauzas*, and Sidli three, while Bijni is under the direct management of the Bijni *zamīndār*. When the Duārs were first annexed, the Bijni Rājā laid claim to the Bijni Duār, on the ground that he had occupied the position of hereditary proprietor of this estate under the Bhutān government. Similar claims were put forward to the whole of the Sidli Duār by the Sidli Rājā. Settlement for a period of seven years was accordingly made in 1870 with the Sidli Rājā, and with the Court of Wards on behalf of the minor Rājā of Bijni. In 1882 the Government of India decided that 130,000 acres should be assigned to the Rājā of Bijni and 170,000 acres to the Sidli Rājā. Settlement was, however, refused by the Rājās, and the estates continued under Government management, the Sidli Rājā receiving 20 per cent. and the Bijni Rājā 7½ per cent. of the gross revenue as *malikāna*. This arrangement is still in force as far as the Sidli Rājā is concerned; but a ten years' lease, which expires in 1911, has been issued to the Bijni Rājā, under which Government receives 20 per cent. of the revenue demand for 1900–1. In the rest of the Duārs settlement is made direct with the villagers. The rates assessed are Rs. 1–8 per acre on homestead or transplanted rice land, and 12 annas per acre on all other kinds of land. The rates originally assessed in Guma were even lower; but in 1893 in the part of Guma that lies west of the forest Reserves the acreage rates were raised to Rs. 3 for homestead land, Rs. 1–14 for land growing transplanted rice, and Rs. 1–8 for land under other crops.

Generally speaking, the Duārs are administered like any other jungly

and unprogressive portion of the District; but in consideration of the primitive character of the inhabitants the Code of Civil Procedure has been declared to be not in force, and civil suits are decided either by *panchāyats* or by the Deputy-Commissioner and his assistants.

Duārs, Western.—A tract in the north-east of Jalpaigurī District, Eastern Bengal and Assam, lying along the foot of the Himālayas, and including some outlying spurs, with an area of 1,862 square miles. Together with the Eastern Duārs, and the Kālimpong subdivision of Darjeeling District, it was annexed in 1865, as the result of the Bhutān War. The country slopes from north-west to south-east, and is intersected by numerous rivers and hill streams which drain the Himālayas. Along the northern boundary a series of well-wooded plateaux, rising to between 1,200 and 1,500 feet, form the connecting link between the mountains and the plains. The soil—a reddish loamy clay, in places of great depth—the climate, and the rainfall, which reaches 180 inches in the year, are all admirably adapted to the growth of the tea plant, which now covers these plateaux for a distance of 30 miles east of the Tīsta as far as the Daina river. East of the Daina the absence of water renders the uplands unfit for tea cultivation, and 'reserved' forests take its place. At the foot of the plateaux stretches a belt of grass jungle, which gradually gives way to the ordinary cultivation of the plains. The closest tillage is to the west between the Tīsta and Jaldhāka, where rich fields of rice, mustard, and tobacco stretch up to the Cooch Behār boundary. Owing to the development of the tea industry the population, which was very sparse when the tract was first acquired, is fast increasing, and the settlement of land for ordinary cultivation is also progressing rapidly; the rates of rent are very low, and cultivators are attracted, not only from the *thānas* west of the Tīsta, but also from Rangpur and the Cooch Behār State. The Western Duārs were roughly settled after annexation, and, with the exception of the forest land and the tea gardens, underwent resettlements in 1874–80 and in 1889–95, the demand being fixed on the last occasion at $3\frac{3}{4}$ lakhs, for a period of fifteen years in the case of four *thānas*, and for ten years in the case of Ambāri-Fālākāta. The average holding of a *jotdār* is 38·6 acres and the incidence of revenue per acre on the whole area is R. 0–15–7, or, if calculated on homestead and cultivated land only, Rs. 1–10. The average holding of an under-tenant is 11·4 acres and of a sub-under-tenant 4·8 acres; the rent paid per acre by under-tenants is Rs. 1–5, or, if calculated on homestead and cultivated land only, Rs. 1–14. The demand on account of land revenue and cesses in 1903–4 was 4·19 lakhs and Rs. 27,000 respectively. The chief seats of trade are at ALĪPUR, BUXA, FĀLAKĀTA, and Maynāgurī.

[D. Sunder, *Report on the Settlement of the Western Duārs* (Calcutta, 1895).]

Dublāna.—Village in Būndi State, Rājputāna. *See* DABLĀNA.

Dubrājpur.—Village in the head-quarters subdivision of Bīrbhūm District, Bengal, situated in 23° 48′ N. and 87° 24′ E., 14 miles south-west of Sūri. Population (1901), 6,715. Dubrājpur is surrounded by tanks, the banks of which are planted with toddy palms (*Borassus flabellifer*). South of the village huge picturesque rocks of granite and gneiss (composed of glassy quartz, pink and grey felspar, and black mica) crop up over an area of a square mile. In the centre is a block of granite, 60 feet in height, united to a mass of gneiss, which adheres to it at an angle of 45°. The summit commands a fine view of the surrounding country as far as Parasnāth and the Rājmahāl and Pānchet hills. A flat-roofed temple has been built on one of these granite rocks, and the whole block is worshipped by the Brāhmans as Mahādeo. The village is an important trade centre, and *tasar* silk, brass, and iron-ware are manufactured.

Dūdhai.—Ruined town in the Lalitpur *tahsīl* of Jhānsi District, United Provinces, situated in 24° 25′ N. and 78° 23′ E., 20 miles south of Lalitpur town. The town stood on the second scarp of the Vindhyan plateau on the bank of an artificial lake. It must once have been of great importance, but nothing is known of its history. Two fine temples stand in the midst of a few miserable huts which are still inhabited, and the ruins of other temples and buildings are scattered over a considerable area. The remains of a circular building of low flat-roofed cells are peculiar, and a colossal image, 20 feet high, of the man-lion incarnation of Vishnu is carved on a hill-side close by. The lake and some of the remains certainly date from the Chandel period.

Dudhkumār.—River in Goālpāra District, Eastern Bengal and Assam. *See* SANKOSH.

Dudhpur.—Petty State in REWĀ KĀNTHA, Bombay.

Dudhrej.—Petty State in KĀTHIĀWĀR, Bombay.

Dufflā.—Hills on the Darrang-Lakhimpur frontier, Eastern Bengal and Assam. *See* DAFLĀ HILLS.

Dugad.—Village in the Bhiwandi *tāluka* of Thāna District, Bombay, situated in 19° 27′ N. and 73° 7′ E., about 9 miles north of Bhiwandi town. Population (1901), 737. Dugad is perhaps Ptolemy's Dunga. It is famous for the defeat of the Marāthās by Colonel Hartley in 1780. On December 8, hearing that the Marāthās intended to throw troops into Bassein, then invested by General Goddard, Colonel Hartley, with a force of about 2,000 effective men, marched from Titvāla near Kalyān, 15 miles north-west, to Dugad. On the 10th the Marāthā general Rāmchandra Ganesh, with 20,000 horse and foot, thrice attacked the Bombay division in front and rear. On each occasion he was repulsed with little loss to the British, though two of the slain, Lieutenants Drew and Cooper, were officers. Next day (December 11) the attack was

renewed, the well-served Marāthā artillery causing the British a loss of 100 men, of whom two, Lieutenants Cowan and Pierson, were officers. During the night Colonel Hartley strengthened with a breastwork and guns two knolls which covered his flanks. Next morning the Marāthās advanced in front and rear against the right knoll, Rāmchandra leading a storming party of Arab foot and 1,000 infantry under Noronha, a Portuguese officer. A thick morning fog helped the attacking force to come close to the picket. Then the mist suddenly cleared and the guns did surprising execution. Rāmchandra died fighting gallantly, Noronha was wounded, and the Marāthās, dispirited by the loss of their leaders, retired in haste and with great loss. The large tomb without inscription in the village of Akloli, 3 miles to the north, was probably raised in honour of the four British officers who fell. On the Gumtara hill close by are the remains of an old fort and water cisterns.

Dugarāzupatnam.—Village in Nellore District, Madras. *See* ARMAGON.

Dugāri.—Village in the State of Būndi, Rājputāna, situated in 25° 40′ N. and 75° 49′ E., about 20 miles north-east of Būndi town. Population (1901), 1,531. The village was granted in *jāgīr* to a younger son of Mahārao Rājā Umed Singh about the middle of the eighteenth century, and is still held by one of his descendants. To the north-west is the largest sheet of water in the State; it is known as the Kanak Sāgar, has an area of about 3 square miles, and its dam is said to have been built in 1580 at a cost of 2 lakhs. A picturesque palace, enclosed within meagre fortifications, stands on a prominent hill in the vicinity.

Dugrī.—*Thakurāt* in the BHOPĀL AGENCY, Central India.

Dujāna State.—Native State in the Punjab, under the political control of the Commissioner of the Delhi Division. The territory comprises three detached areas, lying between 28° 39′ and 28° 42′ N. and 76° 37′ and 76° 43′ E., its main portion being south-west of Rohtak District. The area is 100 square miles, the population (1901) 24,174; and it contains one town, DUJĀNA (population, 5,545), the capital, and 30 villages. It is a level plain interspersed with sandhills and devoid of streams or canals, wells being the only means of irrigation. The founder of the State was a Yūsufzai Pathān soldier of fortune in the Peshwā's service, who eventually obtained employment under Lord Lake, and in 1806 received a grant of the Nāhar and Bahu *parganas* with an extensive tract in Hariāna. The latter, however, he was unable to hold, and in 1809 he exchanged it for the small area around Dujāna, which lies 24 miles north-east of the Nāhar *tahsīl*. Nawāb Hasan Alī behaved well in the Mutiny of 1857. The present Nawāb, Mumtāz Alī, succeeded in 1882. The State is divided into two *tahsīls*, Dujāna and Nāhar, each forming a police circle. There is also a police post at Bāhu

in the Nāhar *tahsīl*. The chief official under the Nawāb is the Dīwān, who has a small staff, while a *tahsīldār* is in charge of Nāhar. The import of opium from Nāhar into British territory is prohibited. There is an Anglo-vernacular middle school at Dujāna, and the State has two medical officers at Dujāna and Nāhar. The land revenue, as assessed in 1889, amounts to Rs. 77,170.

Dujāna Town.—Capital of the Dujāna State, Punjab, situated in 28° 41′ N. and 76° 38′ E., 37 miles west of Delhi. Population (1901), 5,545. Founded by a saint, Durjan Shāh, from whom it derives its name, it afterwards became the residence of a branch of the Yūsufzai Pathāns of Jhajjar, from whom Abdus Samand Khān, the first Nawāb of Dujāna, was descended.

Duki Subdivision.—Subdivision of the Loralai District, Baluchistān, comprising the *tahsīls* of DUKI and SANJĀWI.

Duki Tahsīl.—*Tahsīl* of the Loralai District, Baluchistān, lying between 29° 53′ and 30° 25′ N. and 68° 12′ and 69° 44′ E., with an area of 1,951 square miles and population (1901) of 12,365, an increase of 4,356 since 1891. It lies from 3,000 to 5,000 feet above sea-level. The land revenue, including grazing tax, amounted in 1903-4 to Rs. 56,000. The head-quarters station, Duki, lies close to the village of that name. Villages number 66. Some of the finest pasture grounds in Eastern Baluchistān are to be found here, which are visited by many Ghilzai Powindas during the winter months.

Dum-Dum (*Damdama*, meaning a raised mound or battery).—Town in the Barrackpore subdivision of the District of the Twenty-four Parganas, Bengal, situated in 22° 38′ N. and 88° 25′ E., 7 miles north-east of Calcutta. The town comprises the municipalities of North and South Dum-Dum, with populations (1901) of 9,916 and 10,904 respectively; North Dum-Dum includes the cantonment, with 4,920 inhabitants. Dum-Dum was the head-quarters of the Bengal Artillery from 1783 to 1853, when they were removed to Meerut; at present a detachment of a regiment of British infantry is quartered here in a fine range of barracks. Dum-Dum is also the site of the Government ammunition factory managed by the Indian Ordnance department. The cantonment contains European and native hospitals, a large bazar, Protestant and Roman Catholic churches, and a Wesleyan chapel. In the churchyard are monuments erected to the memory of Colonel Pearse, the first Commandant of the Artillery regiment, and of Captain Nicholl and the officers and men of the Horse Artillery who perished during the retreat from Kābul in 1841. The treaty by which Nawāb Sirāj-ud-daulah ratified the privileges of the British, and restored the settlements at Calcutta, Cossimbazar, and Dacca, was signed at Dum-Dum on February 6, 1757. Dum-Dum was formerly a separate subdivision, which was amalgamated with Bārāsat in 1893. Since that year the

civil and criminal administration of the cantonment has been vested in a Cantonment Magistrate, who is also Cantonment Magistrate of Barrackpore. The annual income of the cantonment fund averaged Rs. 16,200 during the decade ending 1901, and the expenditure Rs. 16,600; in 1903-4 they were Rs. 17,500 and Rs. 17,300 respectively. Dum-Dum is a station on the Eastern Bengal State Railway and the junction of the eastern and central sections of that railway; there is a station on the latter section at Dum-Dum cantonment.

The North Dum-Dum municipality was constituted in 1870, the Kadīhāti municipality being amalgamated with it in 1883. The income and expenditure during the decade ending 1901-2 averaged Rs. 4,500 and Rs. 4,400 respectively. In 1903-4 the income was Rs. 6,000, including Rs. 3,000 obtained from a tax on vehicles; and the expenditure was Rs. 5,700. Filtered water is purchased from the Calcutta Corporation and distributed throughout the cantonment. South Dum-Dum municipality was constituted in 1870. The income and expenditure during the decade ending 1901-2 averaged Rs. 9,000 and Rs. 8,800 respectively. In 1903-4 the income was Rs. 13,000, mainly from municipal rates and taxes, such as a tax on houses and lands, a tax on vehicles, and a conservancy rate; and the expenditure was Rs. 13,700. Filtered water is purchased from the Calcutta Corporation and distributed by hydrants. A *melā* is held every year in honour of the Muhammadan saint Shāh Farīd. A large jute-mill has recently been opened at Dakhindārī; and Pātīpukur, a station on the Eastern Bengal State Railway, is rising into importance as a terminus of the jute traffic.

Dum Dumā.—Village in the Dibrugarh subdivision of Lakhimpur District, Eastern Bengal and Assam, situated in 27° 34′ N. and 95° 33′ E. It is one of the most important centres of the tea industry in Assam, and the market held every Sunday is the largest in the District. A police station is located in the remains of an old fort formerly erected for the purpose of frontier defence.

Dumkā Subdivision.—Head-quarters subdivision of the Santāl Parganas District, Bengal, lying between 23° 59′ and 24° 39′ N. and 86° 54′ and 87° 42′ E., with an area of 1,429 square miles. The subdivision consists for the greater part of a rolling open country, but large tracts are occupied by hill and forest. The population in 1901 was 416,861, compared with 404,312 in 1891, the density being 292 persons per square mile. It contains 2,105 villages, and DUMKĀ, the headquarters, has recently been constituted a municipality. A portion of the Dāman-i-koh Government estate lies within the subdivision.

Dumkā Town (or Nayā Dumkā).—Head-quarters of the Santāl Parganas District, Bengal, situated in 24° 16′ N. and 87° 15′ E. Population (1901), 5,326. Dumkā is one of the oldest British stations

in Bengal. It is shown on the map of 1769 as 'Dumcaw,' and was then a post of *ghātwāli* police in the Bīrhbūm jurisdiction. In 1795 Dumkā was transferred to Bhāgalpur, and was made the site of one of the four Kohistānī police *thānas* for the regulation of the Rājmahāl hills. The name frequently occurs in old records as Dumkah or Doomka till 1855, when it was first called Nayā Dumkā by the officer commanding a detachment of troops stationed there during the Santāl rebellion. It is only occasionally called by the latter name now. The present station is on the site of the old *ghātwāli* post. In 1855 Dumkā became the head-quarters of the Santāl Parganas District, but was soon afterwards abandoned and left only as the head-quarters of the Dumkā sub-district. In 1872 the sub-districts of the Santāl Parganas were changed into subdivisions, and Dumkā again became the head-quarters of the whole District. It contains the usual public offices, but is otherwise only a small bazar on the banks of the Mor river, carrying on a little trade in local produce, European piece-goods, &c. It was constituted a municipality in 1903. In 1904–5 the income was Rs. 7,700, of which Rs. 4,000 was derived from a tax on houses and lands; and the expenditure was Rs. 5,000.

Dumraon Rāj.—Estate in Shāhābād District, Bengal, covering an area of about 758 square miles. The family of the Mahārājā trace their pedigree back to Rājā Vikramājīt, from whom the Samvat era of the Hindus is reckoned. Of their ancestors 69 were the rulers of Ujjain in Mālwā. The founder of the family in Shāhābād District was Rājā Santana Shāhi, who is said to have settled in the village of Karūr in 1320. During the war between Sher Shāh and Humāyūn (1534–40) Gajan Shāhi and Dalpat Shāhi, two rival princes of the family, joined opposing sides, and Gajan Shāhi received Rohtās and Shāhābād and the title of Rājā from Sher Shāh. Rājā Nārāyan Mal was the sole proprietor of Bhojpur and Jagdīspur between 1607–21; his brother Rājā Rudra Pratāp, who succeeded him, removed his residence to New Bhojpur. The head-quarters of the family were moved to Dumraon in 1745. In recent times Mahārājā Maheswar Bakhsh Singh, who came into possession in 1844, was made a K.C.S.I. for his loyalty and services to Government during the Mutiny. He was succeeded in 1881 by his only son, Rādhā Prasād Singh, who had already received the title of Rājā for his services during the famine of 1873–4. He was granted the title of Mahārājā Bahādur, and was subsequently made a K.C.I.E. in 1888. He died in 1894, leaving the present Mahārānī Benī Prasād Kuari as sole heiress and executrix to the estate for his only daughter, the senior Mahārānī of Rewah. The estate is permanently settled; in 1903–4 the current demand for land revenue and cesses payable to Government was 4·8 lakhs. The Rāj maintains an experimental farm at Dumraon, and two important fairs are held at

Barahpur in Phālgun (February–March) and Baisākh (April–May), attended respectively by about 120,000 and 150,000 persons; at the former agricultural produce and stock are exhibited for prizes. A revenue-free grant of 1,500 acres in the Toungoo District of Lower Burma is also held by the Rāni.

Dumraon Town.—Town in the Buxar subdivision of Shāhābād District, Bengal, situated in 25° 33′ N. and 84° 9′ E., on the East Indian Railway, 400 miles from Calcutta. Population (1901), 17,236. It is best known in connexion with the Dumraon Rāj, to which family it has given its name. The principal buildings are the palace and pavilion of the Rāj; and it also contains an experimental farm, maintained by the latter. Dumraon was constituted a municipality in 1869. The income during the decade ending 1901–2 averaged Rs. 7,500, and the expenditure Rs. 6,600. In 1903–4 the income was Rs. 9,600, mainly derived from a tax on persons (or property tax); and the expenditure was Rs. 8,000.

Dumriā.—Village in the head-quarters subdivision of Khulnā District, Bengal, situated in 22° 48′ N. and 19° 26° E., on the Bhadra river. Population (1901), 3,847. It possesses an extensive trade in rice, and boats are largely manufactured.

Dungā Gali.—Small sanitarium in the Abbottābād *tahsīl* of Hazāra District, North-West Frontier Province, situated in 34° 6′ N. and 73° 25′ E. A few houses are scattered over the southern slopes of the Makshpuri hill, belonging to Europeans who visit the place during the summer. Dungā Gali contains an hotel, a post office, and a small church. Together with NATHIA GALI, it forms a 'notified area.'

Dūngarpur State.—State in the south of Rājputāna, lying between 23° 20′ and 24° 1′ N. and 73° 22′ and 74° 23′ E., with an area of 1,447 square miles. It is bounded on the north by Mewār or Udaipur; on the west and south by Idar, Lūnāvāda, Kadāna, and Sunth States in the Bombay Presidency; and on the east by Bānswāra.

Physical aspects.

The country, though fairly open in the south and east, consists for the most part of stony hills covered with a low jungle of cactus, jujube-trees, and a gum-producing tree called *sālar* (*Boswellia serrata*). None of the hills attains a great height. The only perennial rivers are the Mahī and the Som. The former divides the State from Bānswāra on the east and Sunth on the south. The Som rises in Mewār in the hills south of Bīchabhera (about 24° 14′ N. and 73° 26′ E.), and flows south-east till it meets the Dūngarpur border, when it turns first to the east and next to the south, forming the northern boundary of the State until it is joined by the Jākam river. After a course of about 60 miles in, or along the borders of, Dūngarpur, it falls into the Mahī, near the sacred temple of Baneshar, where a large fair is held annually in

February or March. Among minor rivers are the Mājam and the Vātrak, which flow into Idar; the Bhādar, which flows south into Kadāna and eventually joins the Mahī; and the Moran, which rises in the hills south of the capital and joins the Mahī a little to the north of Galiākot.

The geological formations of the State belong to the azoic and igneous groups, and consist of granites, gneisses, metamorphic schists, quartzites, and clay slates. The first three crop up largely in the west and are associated with diorites and traps, while in the central portion of the State clay slates are abundant, and are largely interstratified with veins of quartz and, here and there, of pegmatite granite.

Besides the usual small game, leopards and hyenas are fairly numerous; *sāmbar* (*Cervus unicolor*) used to be plentiful in the Antri jungles before the famine of 1899–1900, and are again increasing. Tigers are occasionally met with, while *nīlgai* are being gradually exterminated by the Bhīls, who value their flesh for food and their hides for shields.

The climate is on the whole temperate and dry, though the months of September and October are generally very unhealthy. The mean temperature is about 75°, with an annual range of about 25°; and the annual rainfall, as recorded at the capital, averages about 27 inches.

History.

In olden days, the territory now styled Dūngarpur and Bānswāra comprised the country called the Bāgar, the land, as a couplet tells us, of 'five gems, namely water, rocks, leaves, abusive language, and the looting of clothes.' It was occupied mostly by Bhīls, and to a smaller extent by Chauhān and Paramāra Rājputs. Towards the end of the twelfth century, Karan Singh was chief of Mewār, and, as his country was being ravaged by Rānā Mokal, a Parihār Rājput of MANDOR in Jodhpur, he first sent his eldest son Māhup against the invader, and, on his failing, sent his second son, Rāhup, who brought the Parihār back a prisoner and was thereupon declared heir apparent. Displeased at this, Māhup left his father and, after staying for a few years at AHĀR (near Udaipur), proceeded south and took up his abode with his mother's people, the Chauhāns of Bāgar, whence, by gradually driving back the Bhīl chieftains, he became master of most of that country. The chiefs of Dūngarpur are descended from Māhup, and consequently claim to belong to an elder branch of the family now ruling in Mewār. This claim, according to Sir John Malcolm, was tacitly admitted by the highest seat being always left vacant when the Mahārānā of Udaipur dined, but the Mewār authorities assert that such a custom was never in vogue. They say that no special respect has ever been paid in Udaipur to the Dūngarpur family in consequence of its descent from an elder branch, and that Māhup was deliberately disinherited by his

ther because he had proved himself unfitted to contend with Mewār's emies. From the fact of Māhup having resided for some time at hār, the Dūngarpur family are called Ahāriyas. Rāwal Deda, said have been sixth in descent from Māhup, seized the town of Galiākot the south-east from the Paramāras and made it his residence, while ater on Rāwal Bīr Singh founded DŪNGARPUR TOWN, naming it after Bhīl chieftain, Dūngaria, whom he caused to be assassinated. One of the promises he made to Dūngaria's widows was that a portion of the installation ceremonies of future Rāwals (or Mahārāwals as they are now called) should be performed by a descendant of Dūngaria: that is to say, that one of the latter should take blood from his finger and mark the *tilak* on the forehead of the new chief. This custom was observed till fairly recent times. As described in the article on BĀNSWĀRA STATE, Rāwal Udai Singh of Bāgar was killed at the battle of Khānua in 1527, and his territory was shortly after divided between his two sons and now forms the separate States of Dūngarpur and Bānswāra, the river Mahī being the boundary. When the Mughal empire became consolidated, the Dūngarpur chief opened communication with the court, and his successors paid tribute and rendered military service. Upon the fall of the empire, Dūngarpur became tributary to the Marāthās, from whose yoke it was rescued by the British. By a treaty concluded in 1818 the State was taken under protection; and in return the Mahārāwal agreed to pay to the British Government all arrears of tribute due to Dhār or any other State, and such further sum annually as the Government might fix, provided it did not exceed three-eighths of the revenue of the State. The tribute was gradually raised to *Sālim shāhi* Rs. 35,000, and since 1904 has been Rs. 17,500 (British). As in other States inhabited by wild hill tribes, it became necessary at an early period of British supremacy to employ a military force to coerce the Bhīls, who had been excited to rebellion by some of the disaffected nobles. The Bhīl chieftains, however, submitted to terms before any actual hostilities commenced. The present chief of Dūngarpur is Bijai Singh, who was born in 1887, and succeeded his grandfather, Udai Singh, in 1898, and is being educated at the Mayo College at Ajmer. The chief of Dūngarpur bears the title of Mahārāwal, and is entitled to a salute of 15 guns.

Population.

The number of towns and villages in the State is 632, and the population at each Census was: (1881) 153,381, (1891) 165,400, and (1901) 100,103. The first two enumerations were, as regards the Bhīls, merely estimates; the number of their huts was roughly ascertained, and four persons, two of each sex, were allowed to each hut. Though the population was undoubtedly less in 1901 than in 1891, owing to the famine of 1899–1900, yet the decrease was not so much as 39 per cent., and there is reason to

believe that the Bhīls were over-estimated in 1891. The State is divided into three *zilas*[1] or districts, as shown below:—

Zila.	Number of		Population, 1901.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
	Towns.	Villages.			
Aspur . . .	...	181	31,920	*Zila* figures not available	913
Dūngarpur . .	1	226	29,276		1,114
Sāgwāra . .	...	224	38,907		1,259
State total	1	631	100,103	− 39·5	3,286

The head-quarters of these districts are at the places from which each is named. About 56 per cent. of the people are Hindus and more than 33 per cent. Animists. The language mainly spoken is Vāgdī or Bhīlī.

The most numerous tribe in the State is that of the BHĪLS, who number 34,000, or more than one-third of the population; after them come the Pātels, a cultivating class numbering 15,000, the Brāhmans (9,700), the Rājputs (7,000), and the Mahājans (6,600). Nearly 59 per cent. of the people depend on agriculture.

Agriculture.

The cultivated area is almost entirely confined to the valleys and low ground between the hills, where the soil is of a rich alluvial nature. The principal crops are maize and rice in the autumn; and wheat, barley, gram, poppy, and sugar-cane in the spring. On the hill-sides the *wālar* or shifting system of cultivation, described in the article on BĀNSWĀRA, is practised, but has now been prohibited. The majority of the cultivators are Bhīls, who, speaking generally, grow rains crops only. Irrigation is mainly from tanks, and to a less extent from wells and streams; it has been estimated that about one-fifth of the area under cultivation is irrigated.

Forests.

No real attention has hitherto been paid to forest conservancy. In 1875 the State was said to abound in teak and other valuable timber trees, but they have been destroyed by indiscriminate cutting and burning on the part of the Bhīls. The systematic preservation of certain forest tracts has just been started, and a small staff is employed.

Mines and minerals.

The only useful minerals yet discovered consist of iron and copper ores, but the mines have not been worked for a long time. A species of serpentine of a greenish-grey colour is found in several localities, notably at Mātugāmra, five miles north of the capital; and a good durable stone of

[1] Since reduced to two, Aspur and Sāgwāra having been amalgamated.

the granitic class, fit for building purposes, is quarried from a hill 4 miles south-west of the capital.

Arts and manufactures.

Manufactures are unimportant. They consist of carving in wood and stone, and the production of a little silver jewellery and brass and copper utensils and ornaments.

Commerce and communications.

The chief exports are cereals, oil-seeds, turmeric, opium, and *mahuā* flowers; and the chief imports are rice, sugar, salt, cloth, and metals. The trade is mostly with the south and south-west.

There is no railway in the State, the nearest stations being Udaipur on the north and Talod and Idar-Ahmadnagar on the south-west. No metalled roads have been constructed, but the country is traversed by two main cart-roads running from north to south and east to west, both in very fair order. British post offices are worked at the capital, Galiākot, and Sāgwāra, while for the carriage of State reports and returns and, to a small extent, private correspondence between the capital and important places not served by the British system, the State keeps up a few *dāk* runners at a cost of about Rs. 750 a year. Telegraph offices have recently been opened at the capital and Sāgwāra.

Famine.

Up to 1899 the State was more or less free from famine, though there was scarcity in 1869–70. In 1899 only 10 inches of rain fell, and the maize crop, the staple food of the masse failed. The Darbār was slow in starting relief operations and much distress occurred, especially among the Bhīls, of whom 16 to 25 per cent. died. Half the cattle perished, and the expenditure, including advances to agriculturists and remissions of land revenue, was about 1·8 lakhs. Famine again visited the country in 1901–2, and cost the State 1·5 lakhs.

Administration.

During the minority of Mahārāwal Bijai Singh the State is administered by a Political officer, assisted by a *Kāmdār* or chief executive officer and a consultative Council of two members. A Revenue Superintendent is in charge of the revenue work of the entire State, and each of the districts is under an official termed *ziladār*.

Legislation and justice.

In the administration of justice the British Codes serve as guides to the various courts. Each *ziladār* has the powers of a third-class magistrate, and can try civil suits the value of which does not exceed Rs. 100; the *Faujdār*, besides hearing appeals against the decisions of *ziladārs*, is a first-class magistrate with powers in civil suits up to Rs. 10,000. The Council, with the Political officer (or, in his absence, the *Kāmdār*) as president, hears appeals against the orders of the *Faujdār* and tries all cases beyond his powers, its decisions in Sessions cases and in civil

suits exceeding Rs. 10,000 in value being subject to the confirmation of the Resident in Mewār, while sentences of death, transportation, or imprisonment for life have to be confirmed by the Governor-General's Agent in Rājputāna.

Finance.

The normal revenue of the State is at present about 2 lakhs, the chief sources being land revenue (Rs. 1,00,000) and customs (Rs. 50,000); the normal expenditure is about 1·4 lakhs, the main items being cost of administration (Rs. 80,000) and tribute (Rs. 17,500). The State owes about 2½ lakhs to the British Government. Dūngarpur has no coinage of its own, the rupees current in the State being the British (in which customs duty and judicial fines have been levied since April, 1902), the *Chitori* of Mewār, and the *Sālim shāhi* of Partābgarh. As the two last-mentioned currencies had greatly depreciated, it was resolved to demonetize them. The average rates of exchange for 100 British rupees during the period taken were 136 *Chitori* and 200 *Sālim shāhi* respectively, and these were adopted by the Government of India; but the actual market rates during the three months fixed for the conversion were more favourable to the holders of the coins it was desired to call in, and the result was that only 346 *Sālim shāhi* and 43 *Chitori* rupees were tendered for conversion. The British coin has, however, since July 1, 1904, been the sole legal tender in the State.

Land revenue.

Land is classified, as is usual in Rājputāna, into *khālsa* or crown lands, *jāgīr* or lands held by nobles, and *khairāt* or religious grants; but as no boundaries exist, it has not infrequently happened that both the Darbār and a *jāgīrdār* have tried to collect revenue from some unfortunate cultivators. In the *khālsa* area there have been various methods of assessment; the *barār* or ground-rent has in some cases been fixed for a term of years, and in other cases determined after inspection of the crops. The amount varied according to the condition of the State's finances and the requirements of the chief. The land revenue was paid sometimes in cash, sometimes in kind, and sometimes in both. No fixed system was laid down; and in addition to the *barār*, numerous petty cesses were recognized, any or all of which might be demanded. A settlement has just been made for a term of ten years in the *khālsa* villages, which number 251. The initial demand has been fixed at Rs. 1,07,852, which will rise to Rs. 1,10,642 in the seventh year (1912–3). The rates per acre vary from Rs. 7 for the best *chāhi* or well land to 8 annas for the *rākar* or poorest soil.

Army, police, and jails.

The army formerly maintained has been disbanded; and an efficient police force of 204 officers and men, of whom 15 are mounted, has been substituted, at an annual cost of about Rs. 22,000. The jail at the capital is unsuitable

for a prison, but funds do not permit of the construction of a new building.

Education.

In 1901 about 3 per cent. of the population were returned as literate (6·5 per cent. males and 0·1 per cent. females). The only school was attended by about 88 boys. Since the last Census there has been considerable progress; 10 vernacular schools have been opened in the districts, including one elementary school specially for Bhīls. The daily average attendance at these 10 institutions is about 350, while that at the older school has risen to 160.

Medical.

Two hospitals are maintained, one at the capital and the other at Sāgwāra (opened in 1904), which have accommodation for 7 in-patients. In 1905 the number of cases treated was 14,188, of whom 58 were in-patients, and 435 operations were performed. In 1905–6 the two vaccinators employed by the Darbār successfully vaccinated 1,085 persons, or nearly 11 per 1,000 of the population, a great improvement on the work of earlier years.

[*Rājputāna Gazetteer*, vol. i (1879, under revision); A. T. Holme, *Settlement Report* (Allahabad, 1905).]

Dūngarpur Town.—Capital of the State and head-quarters of the *zila* or district of the same name in Rājputāna, situated in 23° 51′ N. and 73° 43′ E., about 66 miles south of Udaipur city. Population (1901), 6,094. The town was founded about the end of the fourteenth century by Rāwal Bīr Singh, and named after a Bhīl chieftain, Dūngaria, who was a more or less independent ruler and aspired to marry the daughter of a wealthy Mahājan named Sāla Sāh. The latter simulated consent, but fixed a distant date for the celebration of the marriage, and in the meantime arranged with Bīr Singh to have the whole marriage party, including Dūngaria, assassinated while in a state of intoxication. This was successfully carried out. Overlooking the town is a hill 1,403 feet above the sea-level, and 5 miles in circumference at base; on it are the temples erected by Bīr Singh in memory of the widows of Dūngaria Bhīl, and the Mahārāwal's palace, while at its foot is a lake called the Geb Sāgar. The town is said to have been besieged in the beginning of the nineteenth century by a Marāthā force under Shāhzāda Khudādād, and to have held out stoutly for twenty days, when the besiegers obtained access through the treachery of one of the Mahārāwal's Sardārs named Mehrūp. The place is locally famous for its toys, drinking vessels, and images carved out of a greenish stone found in the neighbourhood, and for bedsteads and stools made of teakwood and fancifully coloured with lac. A municipal committee was appointed in 1897, which attends to lighting and sanitation. The income in 1903–4 was Rs. 3,400, chiefly derived from

an impost of one anna in the rupee on all customs dues; and the expenditure was Rs. 2,400. In the town are a British post and telegraph office, a jail with accommodation for 38 convicted and 30 under-trial prisoners, an Anglo-vernacular school attended by about 200 boys, and a hospital with accommodation for 6 in-patients. The jail and hospital are periodically visited by the Medical officer of the Mewār Bhīl Corps.

Dunyāpur.—Town in the Lodhrān *tahsīl* of Multān District, Punjab, situated in 29° 49′ N. and 71° 49′ E. Population (1901), 2,150. It is mentioned in the *Ain-i-Akbarī*, and at the beginning of the sixteenth century was the scene of a great fight between the Bhāti chief, Rāwal Chachik of Jaisalmer, and the Langāh princes of Multān. The place ceased to be a municipality in 1893, but is administered as a 'notified area.'

Durbhanga.—District, subdivision, estate, and town in Bengal. *See* DARBHANGĀ.

Durduria.—Site of a ruined fort in the head-quarters subdivision of Dacca District, Eastern Bengal and Assam, situated on the banks of the Bānār river, about 8 miles above its junction with the Lakhyā. The popular name of the fort, which is said to have been built by some Bhuiyā or local chief, is Rānībāri ('queen's palace'). The fort is crescent-shaped, and there are ruins of two buildings, one of which was probably a tower. The enclosing wall is more than 2 miles in length, and in 1839 stood from 12 to 14 feet high. Opposite to Durduria are the foundations of a tower and two magnificent tanks.

Durgāpur.—Village in the Netrakonā subdivision of Mymensingh District, Eastern Bengal and Assam, situated in 25° 8′ N. and 90° 41′ E., at the foot of the Gāro Hills on the Someswarī river. Population (1901), 422. It is the site of the palace of the Mahārājā of Susang.

Durrung.—District in Eastern Bengal and Assam. *See* DARRANG.

Dwārā Bāzār.—Market village in the Sunāmganj subdivision of Sylhet District, Eastern Bengal and Assam, situated in 25° 3′ N. and 91° 34′ E., on the north bank of the Surmā river. It has a large export trade to Bengal in lime, bay-leaves, and oranges. Dwārā Bāzār is the river terminus of a small railway which is being constructed from this point to Ischāmati, to afford an outlet for the coal found in the Khāsi Hills.

Dwārāhāt.—Village in the District and *tahsīl* of Almorā, United Provinces, situated in 29° 47′ N. and 79° 26′ E., 12 miles north of Rānīkhet. Population (1900), 464. The place was once the residence of a branch of the Katyūrī Rājās, and the remains of many beautifully carved temples are scattered about. Some were desecrated by the Rohillas in the eighteenth century, and are no longer used for worship. In the principal temple are several images, two bearing inscriptions

of the eleventh century. Some curious tombs built of tiles have been referred to an invasion of the hills by the Mughals under Tīmūr. Two dispensaries are maintained here, one being supported by the American Mission. The village is becoming an important trade centre for the west of the District.

Dwārā Nongtyrmen.—Petty State in the Khāsi Hills, Assam. The population in 1901 was 362, and the gross revenue in 1903–4 Rs. 100. The principal products are rice, millet, and oranges. The most valuable mineral deposit is lime.

Dwārka.—Town and port in the Okhāmandal *tāluka*, Amreli *prānt*, Baroda State, situated in 22° 22′ N. and 69° 5′ E., 235 miles south-west of Ahmadābād, and 270 west of Baroda city. Population (1901), 7,535. Dwārka is considered one of the most holy places in India, and is greatly resorted to by Hindu pilgrims. In particular the temple of Dwārkānāth ('Lord of Dwārka,' a title of Krishna), which is built on the north bank of the Gomti creek, is said to be visited by at least 10,000 devotees annually, and most pious Hindus believe that it was raised in one night by supernatural agency. It is built of sandstone, plastered with *chunām*, and the main structure is five storeys in height, the highest being 100 feet from the ground. The whole is surmounted by a conical spire rising to the height of 150 feet. The interior consists of a shrine, and a hall with 60 pillars. At Dwārka is one of the four *maths* founded by Srī Sankarāchārya, the others being at SRINGERI in Mysore in the south, JAGANNĀTH in Orissa in the east, and BADRINĀTH on the Himālayas in the north.

The port of Dwārka, known as Rūpan, is about a mile to the north of the town; but the anchorage is insecure, and most steamers have to lie two miles or more off shore. The lighthouse has recently been entirely renovated. The chief exports are *bājra*, *tal*, *ghī*, and small quantities of salt, while the chief imports are rice, wheat, *jowār*, sugar, piece-goods, &c. External trade is principally with Bombay, Surat, Karāchi, and Zanzibar. Dwārka possesses a hospital, a magistrate's court, Anglo-vernacular and vernacular schools, and public offices. It is also the head-quarters of the Okhāmandal battalion of Baroda troops, whose principal duty is to keep in order the Wāghers. Since the rebellion of these tribes in 1859, when the town was stormed by a British force, an officer of the Bombay Political department has been stationed here under the orders of the Resident at Baroda. The municipality receives a grant from the State of Rs. 1,900.

Eastern Bengal and Assam.—In 1901 the Province of Bengal covered an area of nearly 190,000 square miles, and contained a population of 78½ million persons. The attention of the Government of India had for some time been drawn to the constantly accumulating evidence of the excessive and intolerable burden imposed upon the

Bengal Government by a charge too great for a single administration, and of the consequent deterioration in the standards of government, notably in portions of Eastern Bengal. In December, 1903, the question of the redistribution of the territories included in the Provinces of Bengal and Assam was raised by the Government of India, and careful consideration was given to the various schemes which were put forward with the object of carrying out what was admitted on all hands to be a very necessary measure of reform. It was recognized that there were strong objections to depriving the people of Eastern Bengal of certain privileges associated with the more developed forms of administration in India, to which for many years they had been accustomed; and it was finally decided to form a Province administered by a Lieutenant-Governor, with a Legislative Council, a Board of Revenue, and the ordinary machinery of an important charge. The new Province was constituted in October, 1905, and by the Bengal and Assam Laws Act provision was made for the application of the laws in force in the territories affected by the change. The capital is DACCA CITY, with SHILLONG as the summer sanitarium, and CHITTAGONG as the seaport.

The Province of Eastern Bengal and Assam consists of the territories formerly administered by the Chief Commissioner of Assam, to which have been added the Dacca and Chittagong Divisions, with the Districts of Rājshāhi, Dinājpur, Jalpaigurī, Rangpur, Bogra, Pābna, and Mālda. It is bounded on the south by the Bay of Bengal; on the east by the territories under the administration of the Lieutenant-Governor of Burma and by hilly country inhabited by independent tribes; on the north by the Himālayas; and on the west by the Madhumatī river up to the point where it breaks off from the Ganges, and thence by the Ganges up to Sāhibganj. From that point the boundary runs along the western border of Mālda, Dinājpur, and Jalpaigurī Districts to the foot of the Himālayas.

The total area of the Province is 111,569 square miles, of which 12,542 square miles are included in the Native States of Hill Tippera and Manipur. The present article contains but a brief account of the natural features, economic conditions, and administrative machinery of the new Province, and for further details reference should be made to the articles on BENGAL and ASSAM.

Physical aspects.

The Province includes the lower portions of the chief river systems of Northern and Eastern India, with a great variety of natural features in different tracts. That part of the area transferred from Bengal, which stretches from the foot-hills of the Himālayas to the Padmā on the south, forms part of the great Gangetic plain and is wholly alluvial, with the exception of a strip of submontane country in Jalpaigurī and of an elevated tract of quasi-laterite soil, known as the BĀRIND, on the confines of the Districts

of Dinājpur, Mālda, Rājshāhi, and Bogra. The general level of the country is very low, especially in Rangpur and the central part of Rājshāhi, where the rivers have silted up and there is a network of moribund streams and watercourses. In the extreme north, the SINCHULĀ HILLS in Jalpaigurī rise abruptly to a height of from 4,000 to 6,000 feet; but the tract lying south of this within the angle formed by the converging channels of the Ganges and Brahmaputra is a rich alluvial country, which stretches eastwards from the Ganges, and southwards from the submontane forest belt, in an expanse of almost monotonous fertility, clothed with perennial turf, and well provided with water carriage.

From west to east at right angles to the upper portion of this tract, in Assam proper, stretches the Brahmaputra valley, which forms an alluvial plain about 450 miles long with an average breadth of 50 miles. About the centre of the valley there is a tract of mountainous country known as the MĪKĪR HILLS, which covers an area of some 2,000 square miles, and contains peaks upwards of 4,000 feet in height. Low hills of gneissic rock are also found on both sides of the river in the neighbourhood of Gauhāti and Goālpāra, but elsewhere there is little to interrupt the even level of the plain. The Brahmaputra, through the greater part of its course, is bounded on either side by stretches of marsh land covered with high grass jungle. Farther inland the level rises, and there is a belt, usually of considerable breadth, of permanent cultivation, the staple crop raised being transplanted rice. In most parts of the valley this belt supports a fairly dense population, but nearer the hills cultivation again falls off, and grassy plains and forests stretch to their feet. The general aspect of the valley is extremely picturesque. On a clear day the view both to the north and south is bounded by hills, while behind the lower ranges of the Himālayas snowy peaks glisten in the sun. The rice-fields are interspersed with groves of feathery bamboos, and on every side there are rivers, woods, and pools. The slopes of the lower hills are clothed with forest, and the rivers that debouch upon the plain issue through gorges of exceptional beauty.

A mountain system known as the ASSAM RANGE separates the valley just described from that of the Surmā. This range projects at right angles from the Burmese system, running almost due east and west. The central portion consists of a fine table-land at an elevation of nearly 6,000 feet above the level of the sea, but on the east and west alike the hills, as a rule, take the form of sharply serrated ridges. The highest point in British territory is Mount Jāpvo in the Nāgā Hills, whose summit is nearly 10,000 feet above sea-level. The Surmā Valley is a flat plain about 125 miles long by 60 wide, shut in on three sides by ranges of hills. The western end of this valley lies very low, and, as in the rest of the delta, the banks of the rivers are the highest portion of the country. During the rains the greater part of western Sylhet lies

under water, but in Cāchār and eastern Sylhet the conditions of life are less unfavourable. Blue hills bound the view on every side, and the villages are surrounded by dense groves of fruit trees. The hills rise like a wall along the northern border, but on the south outlying ranges from the Tippera system project into the valley.

The south of the Province includes the delta of the Ganges and Brahmaputra and is also mainly alluvial; but on the confines of Dacca and Mymensingh the MADHUPUR JUNGLE, a tract with a stiff clay soil resembling that of the Bārind, rises above the alluvium, and in the south-east the hill range that divides Assam from Burma projects into it. It is a great deltaic tract, enriched by annual deposits of fertilizing silt from a hundred interlacing rivers, and possessed of an abundant water-supply. Owing to the annual overflow of the great rivers that traverse it, this tract remains practically under water for six months of the year, the villages stand on little mounds rising from the waste of waters, and at this season boats are the only means of communication. The alluvial rice-fields cease as the rivers draw near the sea, and this portion of the delta is an intricate system of sea-creeks and half-formed islands, densely clothed in many places with jungle and sparsely inhabited. On the south-eastern frontier a succession of low ranges covers the east of the Chittagong Division and Hill Tippera. None of them is of any great height, but the Sītākund Hill rises to 1,155 feet, and in the Chittagong Hill Tracts they attain a greater altitude, the highest peaks being Keokrādang (4,034 feet) and Pyramid Hill (3,016 feet). These hills are covered with bamboo jungle and brushwood, and are separated by cultivated river valleys; a narrow strip of rice land divides them from the sea, and to the south a series of low flat islands skirt the coast, while the shores have the same mangrove vegetation as in the Sundarbans.

The Tsan-po, which is probably identical with the BRAHMAPUTRA, is believed to enter the Assam Valley from the Tibetan table-land by the channel known as the DIHĀNG river. It then flows for a distance of about 450 miles in a south-westerly direction, and on reaching the western extremity of the Assam Range, turns south and finally unites with the main stream of the Ganges at Goalundo. In its course through the plains of Bengal the Brahmaputra is known as the Jamunā, and the Ganges as the Padmā, while the Meghnā is the name assigned to the gigantic river formed by the confluence of their waters. The Surmā is one of the largest tributaries that joins this immense system. It rises in the mountain ranges on the northern boundary of Manipur, and after a tortuous course of 560 miles falls into the old bed of the Brahmaputra near Bhairab Bāzār. All of these rivers, with their countless affluents and distributaries, are heavily laden with silt, much of which is deposited in times of flood in the neighbourhood of their

banks. The slope of the country is thus always away from, and not towards, the river channels, and the water in the numerous cross-channels flows from, and not into, the main streams. A mighty volume of turgid water thus spreads over the country, until, leaving the silt behind, it finds an exit by fresh drainage channels.

In the extreme south an interlacing network of estuaries, rivers, and watercourses encloses a vast number of islands of various shapes and sizes, which are themselves often half swamp. The largest of these are DAKHIN SHĀHBĀZPUR, SANDWĪP, and HĀTIA, at the mouth of the Meghnā, and KUTUBDIĀ off the Chittagong coast. At the eastern end of the Assam Valley a large island, known as the MĀJULI, has been formed by a change in the main channel of the Brahmaputra. During the rains the greater part of Eastern Bengal is under water, and huge swamps are formed, some of which, like the CHALAN BĪL, are of very considerable size. In the cold season these great meres dry up, and water remains only in the lowest portions of their basins. In the Manipur valley there is a lake, the LOKTAK, which is of a much more permanent description and covers an area of some 27 square miles.

The whole of the Province is blessed with an abundant rainfall, and though it is occasionally unfavourably distributed, failure of the monsoon and the famine that accompanies such failure are alike unknown. Over the Province as a whole the annual rainfall generally ranges from 70 to 140 inches. The maximum is reached at CHERRAPUNJI, on the southern face of the Khāsi Hills, which is one of the wettest places on the surface of the globe, and has an average rainfall of no less than 458 inches. The rainfall is also very heavy in the country lying immediately to the south of the Assam Range and the Himālayas. Storms and cyclones are rare in the interior of the Province, but cyclones and storm-waves from time to time sweep over the low-lying country near the estuary of the Meghnā. In October, 1897, the islands of Maiskhāl and Kutubdiā were devastated by a storm-wave, and there was a terrible cyclone in Backergunge in 1876. Northern Bengal and Assam are liable to earthquakes, which occasionally do much damage. The shock of 1897 wrecked all masonry buildings in Shillong, Sylhet, and Gauhāti, and upwards of 1,600 persons were killed by falling houses or landslips.

Population.

The total population of the Province in 1901 was 30,961,459, of whom 15,771,904, or 51 per cent., were males. Almost the whole of these persons were living in British territory, as only 457,790 were enumerated in the two Native States of Hill Tippera and Manipur. Eastern Bengal is particularly healthy, and each succeeding enumeration has disclosed a large increase in the population of this portion of the Province. Between 1881 and 1901 the population of the Dacca and Chittagong Divisions increased by 27 per cent. The climate and conditions of the

Surmā Valley are also fairly favourable, and in this portion of the Province the increase between 1881 and 1901 amounted to 17 per cent. The history of Northern Bengal has been less satisfactory. The rivers have been silting up their beds, the land is waterlogged, and epidemics of malarial fever have been serious and prolonged. Public health has been bad in Dinājpur, Rājshāhi, Rangpur, and Pābna; and the Rājshāhi Division showed an increase of only 10 per cent. in the twenty years that preceded the last Census. The Assam Valley has suffered recently from a very deadly form of malarial fever known as *kalā azār*; and in one District, in which this disease broke out in an aggravated form, the decrease of population between 1891 and 1901 amounted to no less than 25 per cent., a greater proportion than reported from any other District in British India in 1901. This decrease of the indigenous population was, however, counterbalanced by the importation of garden coolies, and the net growth in the Assam Valley Division between 1881 and 1901 amounted to 16 per cent. In the Province as a whole the increase in each intercensal period was as follows: 1872–81, 11 per cent.; 1881–91, 10 per cent.; 1891–1901, 10 per cent.; and the total increase between 1872 and 1901 was 34 per cent. The density of the Province as a whole in 1901 was 308 persons per square mile for British territory only, and 278 per square mile after including the sparsely populated Native States of Hill Tippera and Manipur. But in the different Districts the variations from this mean are very large, Dacca coming at one end of the scale with an average density of 952 to the square mile and the Lushai Hills at the other with an average density of 11. With the exception of Jalpaigurī, all the Bengal Districts of the Province are very fully populated, and in places the density of the rural population is extraordinary, the highest point being reached in the Srīnagar *thāna* in Dacca District, where there is a rural population of 1,787 persons to the square mile. In the Surmā Valley, Sylhet has a population of over 400 to the square mile, but the Districts of the Assam Valley are sparsely peopled, and the maximum is reached in Kāmrūp with 153 to the square mile. In the hills the population is naturally sparse and nowhere exceeds 44 to the square mile.

The great majority of the population live in rural areas, and in 1901 only 2 per cent. were enumerated in the 61 towns the Province contains. Nearly all of these places are small and unimportant, and the average population in 1901 was only 12,081. The largest towns are DACCA (90,542), and IMPHAL in Manipur (67,093), though the latter place possesses no urban characteristics and is an overgrown village rather than a town. No other town had a population of as many as 25,000; and in only four towns—RĀMPUR BOĀLIĀ, SIRĀJGANJ,

NĀRĀYANGANJ, and CHITTAGONG—did the number of inhabitants exceed 20,000. In the plains the villages usually take the form of scattered clumps of houses, embedded in dense groves of bamboos and fruit trees; but in the flooded tracts the cottages are often huddled together on sites which have been artificially raised above flood-level. In the hills the villages are generally built on open sites near the summit of the ridges, and among the Nāgās almost attain to the size of little towns.

Of the 31 millions of persons who, in round numbers, constitute the population of the Province, 18 millions are Muhammadans, $11\frac{1}{2}$ millions are Hindus, and $1\frac{1}{4}$ millions animistic tribes. The Muhammadans are largely in the majority in Eastern Bengal, and in the Dacca and Chittagong Divisions there are $10\frac{1}{2}$ million Musalmāns to $4\frac{3}{4}$ million Hindus. In the Rājshāhi Division they are likewise in a majority, and they form more than half the population of Sylhet. In the rest of Assam they are far from numerous, and in this portion of the Province the distinctive feature in the population is the large number of unconverted tribesmen. Tribes of Tibeto-Burman origin inhabit the hills, and the Bodo race is found in the Himālayan *tarai* as far west as Dinājpur. In Chittagong there is a considerable Buddhist population, most of whom are Maghs. Christians numbered 66,000, more than one-fourth of whom were living in the Khāsi and Jaintiā Hills. There is also a large Roman Catholic community with traces of Portuguese descent in Dacca District.

Agriculture.

From the point of view of agriculture, the Province enjoys advantages for which it would be difficult to find a parallel in any other part of India. The rainfall is abundant, is usually well distributed, and is never known to fail. The land of the delta is enriched by yearly deposits of silt; and, in spite of the presence of a great number of rivers, several of which are of enormous size, the damage done by flood is seldom serious. The climate, the soil, and the river systems are all alike favourable to cultivation, and such a calamity as famine or even scarcity is practically unknown, though some local distress was caused by the high price of rice in 1906.

The staple food-crop is rice, which in 1903–4 covered 68 per cent. of the total cropped area. The abundant rainfall renders artificial irrigation unnecessary, though in the Himālayan *tarai* the people not infrequently divert the water of the hill streams to their fields, and by this means raise rich crops from soil which is sometimes poor and sandy. The two most important crops raised for export are jute and tea. Jute in 1903–4 covered an area of 3,100 square miles. This fibre is very generally cultivated in the Districts of Rangpur, Pābna, Dacca, Mymensingh, Farīdpur, and Tippera, and is slowly spreading up the valleys of the Surmā and the Brahmaputra.

The chief centres of tea cultivation are situated in the Districts of Sylhet, Cāchār, Darrang, Sibsāgar, Lakhimpur, and Jalpaigurī. In 1903 there were altogether 971 plantations with a total area of 415,700 acres under plant, which yielded 182,000,000 pounds of tea. Mustard is an important crop in the Rājshāhi Division and in the Districts of Dacca and Mymensingh. Sugar-cane is extensively cultivated in the Dacca and Rājshāhi Divisions, and in the Districts of Mymensingh and Farīdpur upwards of 100 square miles are under cane. Wheat is grown in Rājshāhi and Rangpur, and to some extent in Pābna and Goālpāra; and tobacco is a valuable crop in Jalpaigurī, Rangpur, and Mymensingh.

Forests.

As might be expected from the character of its surface and climate, and the sparseness of its population, the area of forest in the Brahmaputra Valley and the Assam Range is very large. *Sāl* (*Shorea robusta*) is common in Goālpāra, but farther east the forests are, for the most part, evergreen. Here besides *sāl*, which is seldom found east of Nowgong, the most valuable trees are *nahor* (*Mesua ferrea*), *sam* (*Artocarpus Chaplasha*), *gomari* (*Gmelina arborea*), *khair* (*Acacia Catechu*), *sissū* (*Dalbergia Sissoo*), *tita sapa* (*Michelia Champaca*), *ajhar* or *jārul* (*Lagerstroemia Flos Reginae*), and *gunserai* (*Cinnamomum glanduliferum*).

In the hills good forest covers a smaller area than might have been expected. Though there is no lack of wooded country, the system of shifting cultivation practised by the hill tribes is prejudicial to the growth of valuable timber. Evergreen forests are found in the east and south of Cāchār District and in the Native States of Hill Tippera and Manipur. There are valuable forests also in Jalpaigurī and Chittagong. The principal products of Chittagong are bamboos, *jārul* (*Lagerstroemia Flos Reginae*), and *gurjan* (*Dipterocarpus turbinatus*). The total area of 'reserved' forest in what is now the Province of Eastern Bengal and Assam on June 30, 1904, was 5,944 square miles. The gross forest receipts and the expenditure in 1903–4 were 9 lakhs and 6·3 lakhs respectively.

Communications.

The Province is endowed by nature with an admirable system of water communications, and of recent years its system of railways has been much developed. The Assam-Bengal Railway runs from the sea at Chittagong to the eastern end of the Surmā Valley. A little to the west of Silchar the main line crosses the North Cāchār Hills and connects with the Dibru-Sadiyā Railway at the eastern end of the Brahmaputra Valley. Branch lines also run from Lākshām junction to Chāndpur, whence a steamer service plies to Goalundo, and from Lumding to Gauhāti. The northern and western parts of the Province are served by the Eastern Bengal State Railway, and a line is now under construction to Gauhāti,

which will connect Calcutta and Dibrugarh by rail. A branch of this railway also runs through Dacca and Mymensingh Districts from Nārāyanganj to Jagannāthganj on the Brahmaputra.

A very complete steamer service plies upon the numerous waterways. Goalundo, at the junction of the Padmā and Brahmaputra rivers, is the terminus of a great steamer traffic up the Ganges to Ghāzīpur, up the Brahmaputra to Dibrugarh, and up the Surmā to Silchar. A daily service to Nārāyanganj connects Dacca with Calcutta, while mail steamers to Chāndpur link the Assam-Bengal Railway with the Eastern Bengal State Railway. Steamers ply daily from Calcutta through the Sundarbans to Assam, via Barisāl, Chāndpur, and Nārāyanganj. On the Padmā steamers ply between Dāmukdia Ghāt and Rāmpur Boāliā and Godāgari, with a continuation to English Bāzār (Mālda), and between English Bāzār and Sultānganj. From Khulnā steamers run to Barisāl, Noākhāli, Nārāyanganj, Mādārīpur, and other places, and there is a daily service on the Brahmaputra from Goalundo to Phulcharī. Backergunge District is also well served by steamers, and during the rains small feeder-steamers ply on the tributaries of the Barāk (Surmā) and Brahmaputra.

Administration.

The administration of the Province is entrusted to a Lieutenant-Governor, acting immediately under the orders of the Government of India. The general executive staff is principally recruited from members of the Covenanted Civil Service, with a certain proportion of officers deputed from the Indian Army who, at the time of the formation of the new Province, were serving in Assam, together with a Provincial and a Subordinate Service, the great majority of whose members are natives of the country. The first Lieutenant-Governor was Sir J. B. Fuller, previously Chief Commissioner of Assam. He was succeeded in 1906 by Sir L. Hare.

As in other parts of India, the unit of administration is the District, the area in charge of the District Magistrate and Collector, or Deputy-Commissioner as he is called in Assam. There are altogether 27 Districts in the Province, with an average area of 3,668 square miles and an average population of 1,129,766. These Districts are grouped together to form the five Divisions of CHITTAGONG, DACCA, RĀJSHĀHI, the ASSAM VALLEY, and the SURMĀ VALLEY AND HILL DISTRICTS, each of which is under a Commissioner. Districts are further subdivided into subdivisions, of which there are 67, with an average area of 1,478 square miles and an average population of 455,279. In Assam the Subdivisional Magistrate exercises within his own subdivision most of the functions of a District officer, but in Eastern Bengal his duties are principally of a judicial nature. In the permanently settled portions of the Province the smallest unit of administration is the *thāna* or police station ; in the five upper Districts

of the Assam Valley it is the *mauza*, or area for which an officer called the *mauzadār* has contracted to pay the land revenue. In the one tract it is the police who are the visible representatives of Government in rural areas; in the other it is the land revenue officials. The Lieutenant-Governor, in addition to his personal staff, is assisted by three secretaries in the general departments and one secretary in the department of Public Works. Revenue business is, to a great extent, entrusted to a Board, consisting of two senior Civilians. Separate officers are also in charge of the various departments, such as Police, Prisons, Excise, Registration, Land Records and Agriculture, Education, Medical, and Sanitation. The Forest department is under the control of a Conservator, and Civil Accounts are in charge of an Accountant-General, who is directly subordinate to the Finance Department of the Government of India. The Post Office department is in charge of two Deputy-Postmasters-General, and the Telegraph department in that of a Superintendent. These three officers are not, however, under the orders of the Lieutenant-Governor.

The only Native States of any importance under the Government of Eastern Bengal and Assam are HILL TIPPERA and MANIPUR. The Magistrate and Collector of Tippera District acts as Political Agent for Hill Tippera. The Rājā of Manipur, who was appointed after the outbreak of 1891, was placed upon the *gaddi* in 1907, and during his minority the State has been administered by the Political Agent, who has always been a member of the Assam Commission.

Acts of general application are passed in the Council of the Governor-General for making Laws and Regulations, and come into force in the Province of Eastern Bengal and Assam as in other parts of India. Steps have also been taken to provide for the initiation of measures of purely local interest, and the Lieutenant-Governor has been authorized to form a Council of fifteen members for making laws and regulations. Bills passed by this Council require the assent of the Lieutenant-Governor and also of the Governor-General.

Stipendiary magistrates are the foundation of the system of criminal administration, though in Eastern Bengal a considerable amount of work is done by honorary magistrates sitting either singly or as benches. Appeals from their decision lie to the Sessions Judge, except in the case of magistrates with second and third-class powers, from whom appeals lie either to the District Magistrate or to some magistrate who has been specially empowered in this behalf. Appeals from Sessions Judges are heard by the High Court at Calcutta. In Eastern Bengal and Sylhet civil work is in charge of District and Subordinate Judges and a large staff of Munsifs. In the Assam Valley and the Cāchār Plains Assistant Magistrates act as Munsifs, and the District Magistrate discharges the functions of a Subordinate Judge. The ultimate court

of appeal for civil work is also the High Court at Calcutta. In the Hill Districts and certain frontier tracts the High Court has no jurisdiction, except in criminal cases over European British subjects, and the District Magistrate discharges the functions of a District and Sessions Judge.

The receipts under the principal heads of revenue have been: (1880–1) 256·4 lakhs, (1890–1) 302·5 lakhs, (1900–1) 368·3 lakhs, and (1903–4) 371·9 lakhs. The principal heads of receipts in the last-mentioned year were land revenue, 177·4 lakhs; stamps, 80·5 lakhs; excise and opium, 61·7 lakhs; cesses, 35·4 lakhs; and income-tax, 9·1 lakhs. Under the financial settlement for three years made in 1906 the Province receives one-half of the revenue from land, stamps, excise, assessed taxes, and forests, and is responsible for half the expenditure under heads other than land revenue, the greater part of the charges under which are debited to Provincial. The receipts and expenditure on account of general administration, courts of law, registration, police, medical, education, political, superannuation, stationery and printing, and various minor items are entirely Provincial. An annual contribution of 6·2 lakhs is made in favour of Imperial revenues. To cover the initial cost of new administrative arrangements, a grant of 30 lakhs has been added to the 20 lakhs originally given to Assam. The budget figures for 1906–7 are shown in the table on p. 401.

The Public Works department is under the general charge of a Chief Engineer, who is also a secretary to the Local Government, and is aided by an under-secretary. Eastern Bengal and Assam each form a circle in charge of a Superintending Engineer. The executive staff includes 8 Executive and 4 Assistant Engineers. Local works in Eastern Bengal are generally entrusted to a District Engineer, engaged by the District board and working under the supervision of an Inspector of Works, of whom there are two.

The police are under the general control of an Inspector-General, who is assisted by two Deputy-Inspectors-General stationed at Silchar and Dacca. The sanctioned staff consists of 27 District and Assistant Superintendents, 79 inspectors, 778 sub-inspectors, and 7,876 head constables and men. Rural police are employed in every District in the plains outside the boundaries of Assam proper, and in 1904 numbered 56,875. There is also a large force of military police, numbering 2,876 officers and men, who are employed on quasi-military duties, chiefly in Assam.

In 1903 there were 2 Central, 19 District, and 47 subsidiary jails in the Province, and the daily average number of prisoners was 6,682. The larger jails are under the management of whole-time Superintendents, and the control of the department is vested in an Inspector-General of Prisons.

The general management of the Education department is entrusted to the Director of Public Instruction, who is assisted by five Inspectors of schools and a staff of deputy-inspectors and sub-inspectors. There are twelve Arts colleges in the Province, situated at Dacca (2), Chittagong, Barisāl, Comilla, Pābna, Tangail, Mymensingh, Rājshāhi, Gauhāti, Sylhet, and Agartalā. Only four of these colleges receive any direct assistance from the state. On March 31, 1905, 1,724 students were on the roll of the eleven colleges situated in British territory. In 1903–4 the Province contained 1,147 secondary, 20,628 primary, and 4,121 special schools. The total number of scholars was : boys 715,861, and girls 65,290.

Education.

The Medical department is divided into two branches. An Inspector-General of civil hospitals is the head of the department, while a Sanitary Commissioner has been appointed to deal with all questions of a purely sanitary character. In 1903 the Province contained 391 hospitals and dispensaries, at which more than 3,000,000 patients were treated and 83,483 operations performed. There are lunatic asylums at Dacca and Tezpur, and an asylum for the reception of lepers at Sylhet.

TABLE I

Distribution of Population in Eastern Bengal and Assam, according to the Census of 1901

District or State.	Area in square miles.	Number of towns.	Number of villages.	Total Population.			Urban Population.			Population per square mile.
				Persons.	Males.	Females.	Persons.	Males.	Females.	
Districts.										
Rājshāhi	2,593	2	6,344	1,462,407	741,690	720,717	30,243	16,160	14,083	564
Dinājpur	3,946	1	7,841	1,567,080	823,972	743,108	13,430	8,067	5,363	397
Jalpaigurī	2,962	2	766	787,380	422,877	364,503	10,289	6,513	3,776	266
Rangpur	3,493	6	5,212	2,154,181	1,125,109	1,029,072	29,484	18,892	10,592	617
Bogra	1,359	2	3,865	854,533	437,349	417,184	11,198	6,319	4,879	629
Pābna	1,839	2	3,720	1,420,461	709,396	711,065	41,538	22,209	19,329	772
Mālda	1,899	3	3,555	884,030	437,639	446,391	34,426	17,654	16,772	466
Rājshāhi Division	18,091	18	31,303	9,130,072	4,698,032	4,432,040	170,608	95,814	74,794	505
Dacca	2,782	2	7,263	2,649,522	1,312,417	1,337,105	115,014	67,331	47,683	952
Mymensingh	6,332	8	9,770	3,915,068	2,014,805	1,900,263	105,397	59,733	45,664	618
Farīdpur	2,281	2	5,283	1,937,646	970,164	967,482	29,112	16,238	12,874	849
Backergunge	4,542	5	4,612	2,291,752	1,175,903	1,115,849	45,574	30,996	14,578	505
Dacca Division	15,937	17	26,928	10,793,988	5,473,289	5,320,699	295,097	174,298	120,799	677
Tippera	2,499	3	5,361	2,117,991	1,085,989	1,032,002	48,446	28,656	19,790	848
Noākhāli	1,644	1	2,633	1,141,728	568,777	572,951	6,520	4,303	2,217	694
Chittagong	2,492	2	1,450	1,353,250	641,392	711,858	25,985	15,540	10,445	543
Chittagong Hill Tracts	5,138	...	296	124,762	68,238	56,524	...	...	...	24
Chittagong Division	11,773	6	9,740	4,737,731	2,364,396	2,373,335	80,951	48,499	32,452	402

TABLE I

DISTRIBUTION OF POPULATION IN EASTERN BENGAL AND ASSAM, ACCORDING TO THE CENSUS OF 1901 (*continued*)

District or State.	Area in square miles.	Number of towns.	Number of villages.	Total Population.			Urban Population.			Population per square mile.
				Persons.	Males.	Females.	Persons.	Males.	Females.	
Districts.										
Sylhet	5,388	5	8,330	2,241,848	1,141,060	1,100,788	30,832	19,046	11,786	416
Cāchār	3,769	1	1,332	455,593	244,161	211,432	9,256	6,575	2,681	121
Khāsi and Jaintiā Hills .	6,027	1	1,839	202,250	97,221	105,029	8,384	4,980	3,404	34
Nāgā Hills . . .	3,070	1	292	102,402	51,656	50,746	3,093	2,174	919	33
Lushai Hills . . .	7,227	...	239	82,434	39,004	43,430	...	...	...	11
Surmā Valley and Hill Districts Division .	25,481	8	12,032	3,084,527	1,573,102	1,511,425	51,565	32,775	18,790	121
Goālpāra	3,961	2	1,461	462,052	242,685	219,367	10,024	6,868	3,156	117
Kāmrūp	3,858	2	1,716	589,187	292,869	296,318	20,408	11,993	8,415	153
Darrang	3,418	1	1,275	337,313	176,030	161,283	5,047	3,568	1,479	99
Nowgong	3,843	1	1,117	261,160	132,995	128,165	4,430	2,659	1,771	68
Sibsāgar	4,996	3	2,109	597,969	316,985	280,984	10,970	6,660	4,310	120
Lakhimpur . . .	4,529	1	1,123	371,396	199,359	172,037	11,227	7,091	4,136	82
Assam Valley Division	24,605	10	8,801	2,619,077	1,360,923	1,258,154	62,106	38,839	23,267	106
Gāro Hills . . .	3,140	...	1,026	138,274	70,035	68,239	...	...	...	44
Total British Territory	99,027	59	89,830	30,503,669	15,539,777	14,963,892	660,327	390,225	270,102	308
States.										
Hill Tippera . . .	4,086	1	1,463	173,325	92,495	80,830	9,513	5,847	3,666	42
Manipur	8,456	1	467	284,465	139,632	144,833	67,093	32,965	34,128	34
GRAND TOTAL . .	111,569	61	91,760	30,961,459	15,771,904	15,189,555	736,933	429,037	307,896	278

TABLE II

Statistics of Local Boards and Municipalities, Eastern Bengal and Assam, 1903–4

	Number.	Income.	Expenditure.
		Rs.	Rs.
District and Local Boards	33	43,63,338	39,48,543
Municipalities	49	12,98,747	11,71,823

TABLE III

Principal Sources of Provincial Revenue, Eastern Bengal and Assam

(In thousands of rupees)

	Budget for 1906–7.	
	Total amount raised (Imperial, Provincial, and Local).	Amount credited to Provincial revenue.
Land revenue	1,93,62	97,16
Stamps	89,00	44,50
Excise	63,25	31,63
Assessed taxes	9,60	4,80
Forests	13,20	6,60
Registration	7,60	7,60
Other sources	64,08	31,56
Total	4,40,35	2,23,85

TABLE IV

Provincial Expenditure under Principal Heads, Eastern Bengal and Assam

(In thousands of rupees)

	Budget for 1906–7.
Opening balance	62,00
Charges in respect of collection (principally land revenue and forests)	39,53
Salaries and expenses of civil departments:—	
(*a*) General administration	9,53
(*b*) Law and justice	46,06
(*c*) Police	39,96
(*d*) Education	12,73
(*e*) Medical	7,24
(*f*) Other heads	5,70
Pension and miscellaneous civil charges	10,35
Public works	55,93
Other charges and adjustments	13,42
Total expenditure	2,40,45
Closing balance	48,22

Eastern Division, Southern Shan States.—A group of Shan States, Burma, consisting of the Sawbwaships of Möngnai, Laihka, Mawkmai, Möngpan, and Möngpawn (with their dependencies), and the Myozaships of Möngnawng, Möngküng, Möngsit, Kehsi Mansam, Kenghkam, Mönghsu, and Kenglön. The division is in charge of an Assistant Superintendent, stationed at Loilem in the Laihka State near the Taunggyi-Kengtung road.

Eastern Duārs.—Tract in Goālpāra District, Eastern Bengal and Assam. *See* DUĀRS, EASTERN.

Eastern Ghāts.—Mountain range in Madras. *See* GHĀTS, EASTERN.

Eastern Nāra.—Canal in Sind, Bombay. *See* NĀRA, EASTERN.

Eastern Rājputāna States Agency.—One of the eight Political Charges into which Rājputāna is divided, comprising the three States of BHARATPUR, DHOLPUR, and KARAULI, and lying between 26° 3′ and 27° 50′ N. and 76° 34′ and 78° 17′ E. It is bounded on the north by the Gurgaon District of the Punjab; on the west by Alwar and Jaipur; on the south and south-east by Gwalior; and on the east by the Agra and Muttra Districts of the United Provinces. The head-quarters of the Political Agent are at Bharatpur. The population increased from 1,043,867 in 1881 to 1,076,780 in 1891, and then fell to 1,054,424 in 1901; the small decrease of 2 per cent. during the last decade is due to the famines of 1896–7 and 1899–1900. The total area is 4,379 square miles, and the density of population is nearly 241 persons per square mile, as compared with 76 for Rājputāna as a whole. Although seventh in size among the political divisions of Rājputāna, the Agency stands fourth as regards population. In 1901 Hindus formed 86 per cent. and Musalmāns more than 13 per cent. of the total. Christians numbered 150, of whom 74 were natives. The following table gives certain particulars for the three States:—

State.	Area in square miles.	Population, 1901.	Normal land revenue (*khālsa*), in thousands of rupees.
Bharatpur . .	1,982	626,665	21,74
Dholpur . . .	1,155	270,973	8,00
Karauli . . .	1,242	156,786	2,75
Total	4,379	1,054,424	32,49

There are altogether 2,271 villages and 11 towns. The largest towns are BHARATPUR (43,601), KARAULI (23,482), DHOLPUR (19,310), and DĪG (15,409).

Edappalli (the Repleim of Dutch writers).—The largest of the *idavagais*, or petty principalities, of the Kunnatnād *tāluk*, Travancore

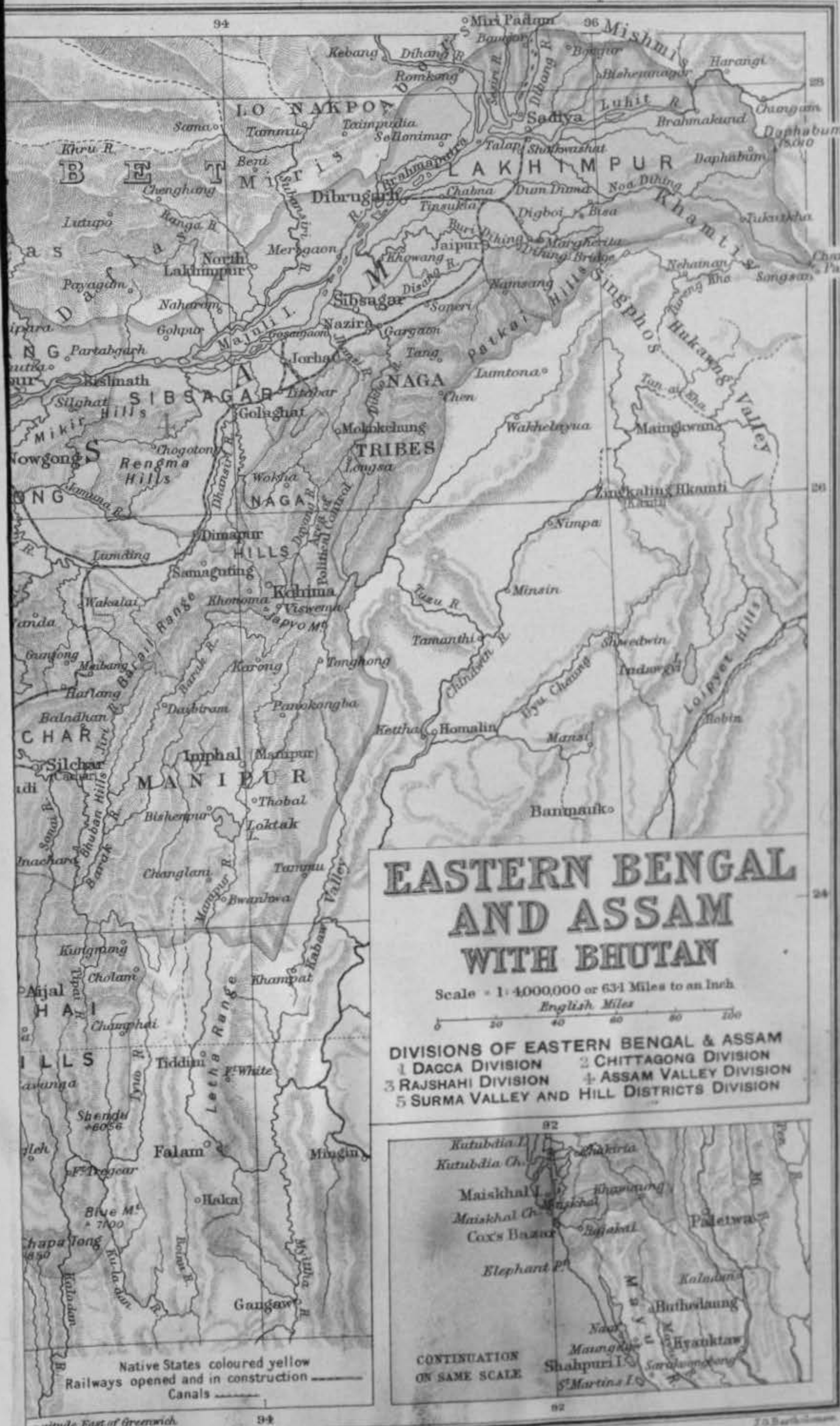
State, Madras, situated in 10° 1′ N. and 76° 22′ E., with an area of 6½ square miles. Population (1901), 13,348. It is held by a Nambūdri Brāhman of the highest rank, who is called the Edappalli Rājā but has no civil or criminal authority within the principality. He is entitled to all the revenue from his lands, and holds them free of tax or tribute to the Travancore State, except a small sum of money for police services rendered. The residence of the Rājā is at Edappalli, now a station on the Cochin-Shoranūr Railway. The Edappalli chiefship is believed to be the sole relic of the ancient theocracy of the west coast.

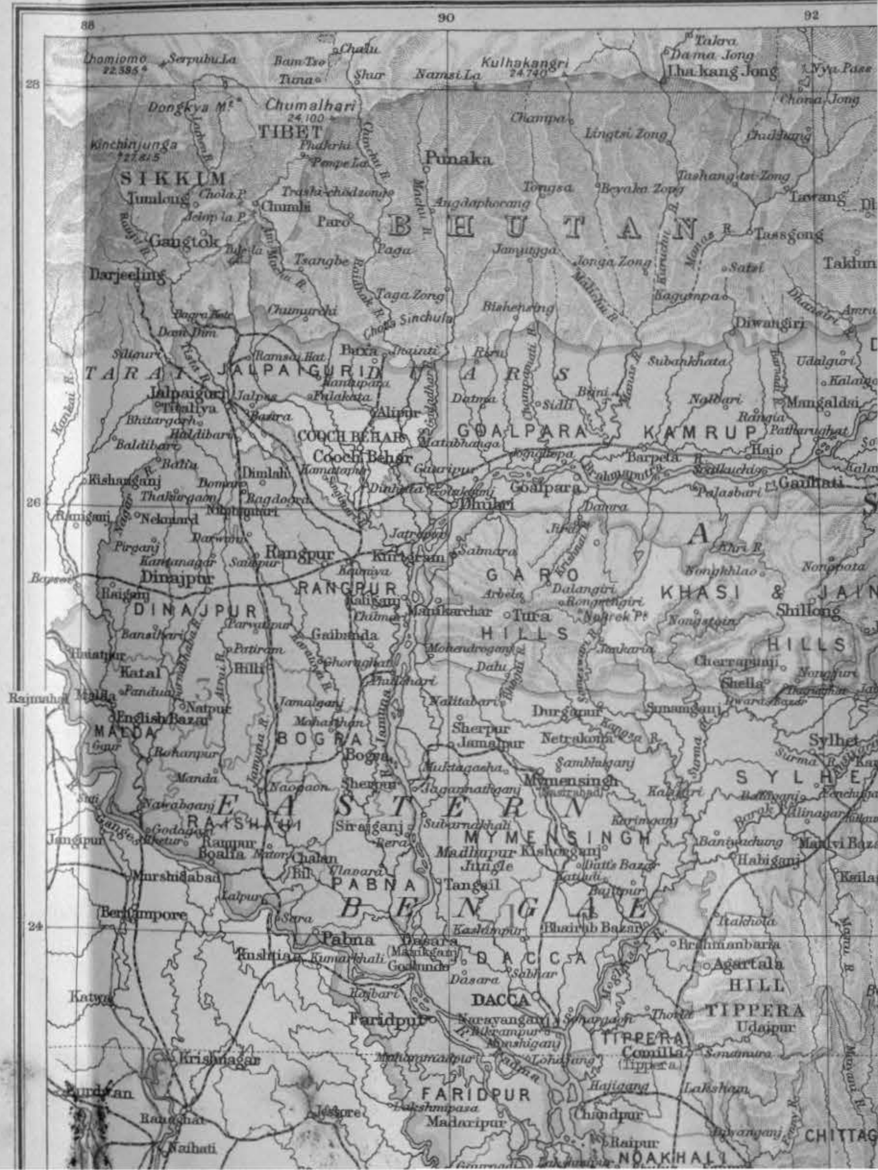
Eden Canal.—An irrigation canal in the Burdwān and Hooghly Districts of Bengal, named after a former Lieutenant-Governor of that Province. Its supply is derived from the Dāmodar river, and to a small extent also from the Banka nullah. The main canal has a length of 27 miles, with 18 miles of distributaries; natural channels which are private property are also used to convey the water. The construction of the canal was commenced in 1873, but proceeded fitfully, and it was not opened till 1881. There is no navigation, the canal having been constructed primarily as a sanitary work to pour a supply of fresh water into old river-beds. The water is, however, of value for irrigation in dry years; and in 1902-3 the area under long lease for irrigation was 43 square miles, while the area actually irrigated in 1903-4 was 44½ square miles. No capital account is kept, but the cost of construction has been 7·8 lakhs. The gross receipts in 1903-4 were Rs. 31,000, and there was a loss on the year's working of Rs. 13,000.

Edlābād.—District, *tāluk*, and town in Hyderābād State. *See* ADILĀBĀD.

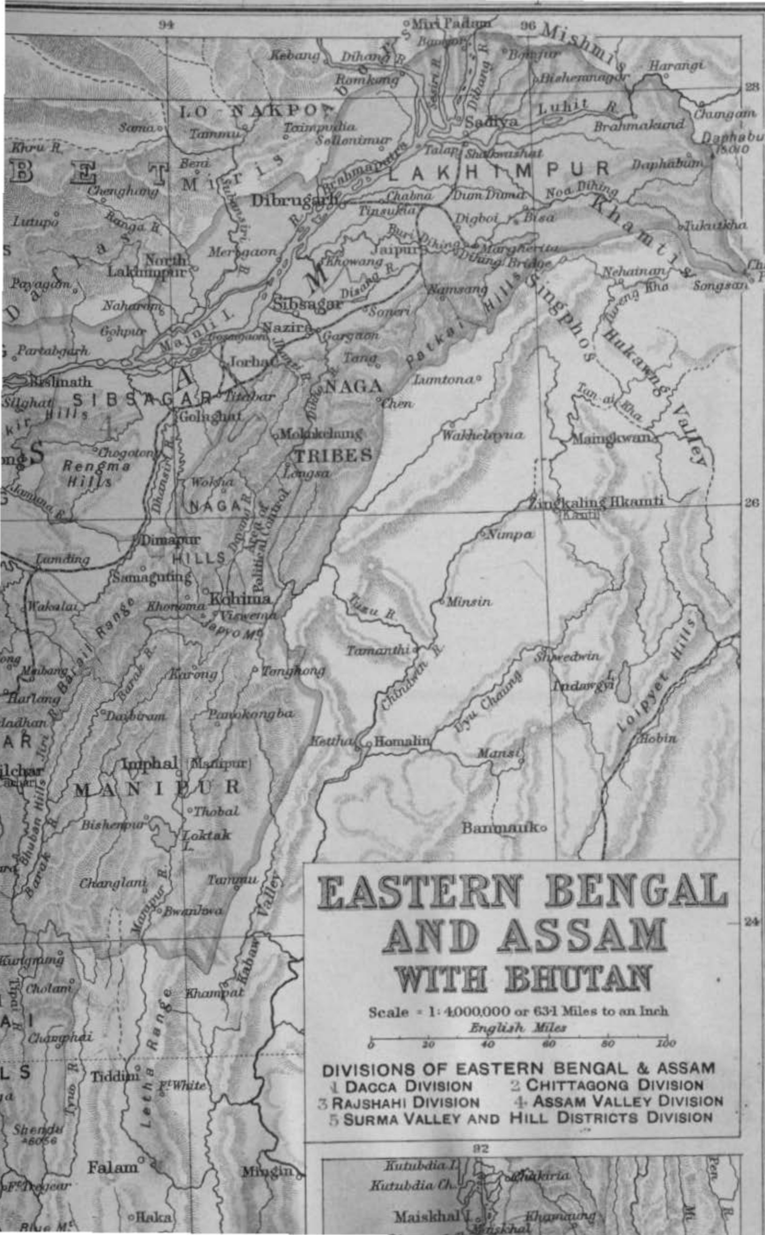
Edwardesābād.—Name sometimes applied to BANNU TOWN, Bannu District, North-West Frontier Province.

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EASTERN BENGAL AND ASSAM
WITH BHUTAN
Scale = 1: 4,000,000 or 63·1 Miles to an Inch
English Miles
0 20 40 60 80 100
DIVISIONS OF EASTERN BENGAL & ASSAM
1 DACCA DIVISION
2 CHITTAGONG DIVISION
3 RAJSHAHI DIVISION
4 ASSAM VALLEY DIVISION
5 SURMA VALLEY AND HILL DISTRICTS DIVISION
CONTINUATION ON SAME SCALE
Native States coloured yellow
Railways opened and in construction
Canals
Longitude East of Greenwich
94
96
92
28
26
24
Mishmi
LAKHIMPUR
SIBSAGAR
NAGA TRIBES
NAGA HILLS
MANIPUR
Sadiya
Dibrugarh
North Lakhimpur
Sibsagar
Jorhat
Golaghat
Nowgong
Dimapur
Kohima
Imphal (Manipur)
Silchar
Lumding
Tinsukia
Jaipur
Margherita
Digboi
Nazira
Majuli I.
Brahmaputra R.
Subansiri R.
Patkai Hills
Singphos
Hukawng Valley
Khamti
Chindwin R.
Homalin
Tamanthi
Kabaw Valley
Loktak L.
Barail Range
Bhuban Hills
Tiddim
Falam
Haka
Blue Mt. 7100
Letha Range
Lushai
Maiskhal I.
Kutubdia I.
Cox's Bazar
Elephant Pt.
Paletwa
Buthidaung
Kyauktaw
Shahpuri I.
St. Martins I.



88
90
92
28
26
24
Chumalhari
24,100
TIBET
Kinchinjunga
SIKKIM
Gangtok
Darjeeling
Punaka
BHUTAN
Paro
Lha-kang Jong
Kulhakangri
Tassgong
Diwangiri
JALPAIGURI
Jalpaiguri
TARAI
DUARS
COOCH BEHAR
Cooch Behar
GOALPARA
Goalpara
Dhubri
KAMRUP
Barpeta
Gauhati
Kishanganj
Rangpur
RANGPUR
Dinajpur
DINAJPUR
GARO HILLS
Tura
KHASI & JAIN
Shillong
HILLS
Cherrapunji
Sylhet
SYLHET
MALDA
English Bazar
Bogra
BOGRA
EASTERN
RAJSHAHI
Boalia
Mymensingh
MYMENSINGH
Sirajganj
Murshidabad
Berhampore
PABNA
Pabna
BENGAL
DACCA
Dacca
Faridpur
FARIDPUR
Madaripur
TIPPERA
HILL TIPPERA
Agartala
Udaipur
Comilla
Krishnagar
Naihati
Rajmahal
Katwa
Chandpur
Raipur
NOAKHALI
CHITTAG
Habiganj
Brahmanbaria
Tangail
Jamalpur
Sherpur
Netrakona
Sunamganj
Kushtia
Natore
Naogaon
Gaibanda
Kurigram


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Homalin
Patkai Hills
Hukawng Valley
Khamtis
Singphos
Miris
Chindwin R.
Brahmaputra R.
Luhit R.
Chaukan Pass
Daphabum